

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number 1988

TO: Phillip Gambel Location: rem/3c70

Art Unit: 1644

Thursday, March 24, 2005

Case Serial Number: 10/018245

From: Alex Waclawiw

Location: Biotech-Chem Library

CM1-6A02

Phone: 308-4491

Alexandra.waclawiw@uspto.gov

Search Notes		
		<i>,</i>



This Page Blank lusato)

STIC-Biotech/ChemLib 148	190
From: Sent: Saturday, March 19, 2005 9:43 AM To: Subject: Subject: Stic	RECEIVED 1880 1880 1880 1880 1880 1880 1880 188
please perform a Sequence and a Sequence Interference Search for	
in Paper	
10 / 018,245 Fukuda tnf-specific antibodies	
SEQ ID NO: 1	
SEQ ID NO: 2	
SEQ ID NO: 3	•
SEQ ID NO: 4	
SEQ ID NO: 5	
SEQ ID NO: 6	
thanx	
phillip gambel art unit 1644 272-0844	
1644 mailbox 3c70	
**************************************	******* Vendors and cost where applicable STN: DIALOG: QUESTEL/ORBIT: LEXIS/NEXIS: SEQUENCE SYSTEM: WWW/Internet: Other(Specify):

This page Blank (Uspto)

Run

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92:
  2222211111111 987654
                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq
    ୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰୰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length:
length:
  Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-018-245A-1
59
1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 7 6 5 4 3 2 1 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2105692 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     geneseqp1980s:*
geneseqp1990s:*
geneseqp2000s:*
geneseqp2001s:*
geneseqp2002s:*
geneseqp2003as:*
geneseqp2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Geneseq_16Dec04:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24,
                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20000000000
  2005, 08:54:17; Search time 75.9375 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version
(c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                    ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               386760381 residues
            AAW70611
AAG80311
ABP61180
ADR62639
ADH62639
ADH62639
ADH62637
AAW24529
AAW24521
AAW27833
                                                                                                                                                                                                                                                                                                                                                    IJ
    ADG6753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5
                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2105692
Abg80311
Abg61180
Adr89785
Adh62639
Adh62637
Adh62637
Adh62637
Aaw24529
Aau80997
Aau80997
Aab84740
Aab84740
Aab8473
Aab27837
Aae27837
                                                                                                                                                                                                                                                                                                                        Aaw70611
                                                                                                                                                                                                                                                                                                                                                   Description
 Anti-VEGF
Anti-huma
Anti-CD70
Mouse ant
Mouse ant
Mouse ant
Anti-Fact
Human ant
Anti-Fact
Human ant
Anti-Fact
Human ant
Anti-Fact
Human ant
Anti-Fact
Mouse KS
Mouse 
    ADG67533
ADG67539
ADG67539
ADG67539
ADG67539
ADG67539
ADG67539
ADG33434
ADAB33434
ADAB33436
ADAB33437
ADAB33437
ADAB33437
ADAB33437
ADAB3437
ADAB3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aae33439
Adg34377
Adg34374
Adg34375
Adg34376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aae33438
Aae33429
Aae33430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aae33434
Aae33435
Aae33414
 Aau80982
Aau81004
Aau80987
Aau80972
Abr61525
Aaw24533
Aaw86808
                                                                                           Aaw24519
Aaw24511
Aaw24511
Aab05901
Aab13390
                                                                                                                                                           Aab11997
Abu89693
Abu89695
Abo10809
Abo10807
Abof1521
Aaw24510
                                                                                                                                                                                                                                                       Aab11995
Aab11999
                                                                                                                                                                                                                                                                                                            Aao23069
Adi01229
Adi01170
Adi01230
Adi01169
Aaw70674
                                                                                                                                                                                                                                                                                                                                                                                                                                Aaw70676
Aab05899
Aab13381
Aab13389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aar25414
Aar41284
Aar38615
Aaw58517
Aaw58479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aae33416
Aae33416
Aae33436
Aao30908
                                                                                                                                                                                                                                                                                                                                                                                                       Abp61245
Abp61243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Adi26496
Aar25412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aae3
Aae3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aao3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aae3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aaw70678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aaw58506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aaw58516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aag80317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aar28750
                                                                                                                                                                                                                                                                                                                                                                                                                                KS antibo
KS antibo
KS antibo
KS antibo
Murine KS
Humanised
Heavy cha
Heavy cha
Heavy cha
Heavy cha
Heavy cha
Humanised
 Humanised
Humanised
Humanised
Humanised
Humanised
Humanised
Murine mo
Murine mo
Murine mo
Murine mo
Anti-Cort
Anti-Cort
Anti-Cort
Anti-Cort
Human alp
Humanised
Anti-Fact
F(ab)-12
Anti-Fact
Mouse ant
Mouse ant
Murine BC
Humanised
Anti-Pact
```

```
RESULT 2
AAG80311
ID AAG8
XX
AC AAG8
                                                                                                                                                                                                                                                                                           RESULT 1
ADAY/0611
ID ADAY/0611
ANY
XX AAW/7
XX AAW/7
XX AAW/7
XX AAW/7
DT 27-J
DE Anti
XX Heak
KW Heak
KW VEGG
KW Anti
XX Yhev
XX VO98
KW ANTi
KW VEGG
KW YEGG
KW YEGG
KW O06-7
PN WO98
XX WO
                                                                                                                                         밁
                                                                                                                                                                       S
                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
66
                                                                                                                                                                                                                                                                                                                               The present sequence represents a heavy chain hypervariable region of the murine anti-vascular endothelial growth factor (anti-VEGF) antibody. The sequence is used to construct the humanised anti-VEGF antibody of the invention. The humanised antibodies are used to inhibit VEGF-induced angiogenesis, particularly for treating or preventing tumours (of any type) and retinal disorders (e.g. age-related macular degeneration or diabetic retinopathy). They can also be used to treat other conditions that involve angiogenesis, e.g. rheumatoid arthritis, psoriasis, atherosclerosis, Grave's disease, etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New humanised antibody with affinity for vascular endothelial growth factor - for treatment of tumours, retinal disease and other angiogenic states, also related nucleic acid, vectors and transformed cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Heavy chain hypervariable region; murine; humanised antibody; anti-vascular endothelial growth factor antibody; anti-VEGF a VEGF-induced angiogenesis; tumour; retinal disorder; age-related macular degeneration; diabetic retinopathy;
    AAG80311,
                                        AAG80311 standard; peptide; 10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW70611 standard; peptide;
                                                                                                                                                                                                                                                                                             Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-1997;
06-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW70611;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 8; Page 79; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-568337/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9845331-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rheumatoid arthritis; psoriasis; atherosclerosis; Grave's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anti-VEGF antibody heavy chain hypervariable region
                                                                                                                                                                                                                  10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENENTECH INC.
                                                                                                                                                                         GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-00833504
97US-00908469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US006604
                                                                                                                                       10
                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Presta LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123
123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW86807
AAW70617
                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
                                                                                                                                                                                                                                  Score 59; DB 2;
Pred. No. 0.0076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ጅ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lowman HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen YM
                                                                                                                                                                                                                                                      Length 10;
                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDRH1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aaw86807 Variable
Aaw70617 Anti-VEGF
                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antibody;
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                0;
RESULT 3
ABP6130
ID ABP6
XX ABP6
XX ABP6
XX ABP6
XX 20-S
XX VX Huma
XX Cytc
KW Vasc
KW reti
KW vari
KW vari
KW Yari
KW Yari
KW Yari
KW Yari
KW Yari
KW Yari
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                      ABP61180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
Mus sp.
                    Homo sapiens
                                                                                                                                                                                                20-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                    10;
                                                                                                                                                                                                                                                                                                                                                                          -
                                                                                                                                                                                                                                                                                                                                                                                                                -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A
```

```
or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factor-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
Cytostatic; ophthalmological; humanised; antibody; anti-VEGF; VEGF; vegecular endochelial growth factor; angiogenesis inhibitor; tumour; retinal disorder; intraocular neovascular disorder; heavy chain; variable domain; CDRH1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic shown that the state of the state o
                                                                                                                                                                                                                                                                                                                                            Humanised anti-VEGF antibody heavy chain variable domain, CDRH1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP61180 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alpha (TNF-alpha) heavy chain CDR1 designated CDR-H1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel heavy chain and light chain polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1a; Page 25; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-066345/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-human TNF-alpha CDR-H1 peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GYTFTNYGMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nakanishi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 59; DB 5; Le
Pred. No. 0.0076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    toxic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

Thu

Mar

24

13:01:21 2005

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
  Pred. Negative score sand is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No. is the greater to derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      e,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length:
                                                                                                                                                                                                                                                                                                                                                                                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         is the number of resu
ater than or equal to
rived by analysis of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-018-245A-1
59
1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
  #1000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11000

11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        March
                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000000000
 2005, 08:57:11; Search time 20.1562 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          results predicted by chance to l
l to the score of the result bein
of the total score distribution
  summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                          -08-783-853A-84
                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               version
- 2005
9-344-050-20

8-425-336-124

8-488-113B-126

8-488-113B-126

8-477-484B-126

8-477-484B-126

8-107-669D-28

8-107-669D-69

8-107-669D-67

8-107-669D-67

8-472-788A-28

8-472-788A-88

8-472-788A-88

8-472-788A-88

8-477-531B-9

9-477-531B-67

9-482-842A-28

9-646-360-124

9-646-360-126

9-642-842A-28

9-082-842A-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mode1
                                                                                                                                                                                                                                                                                                                                            -344-050-84
-783-853A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      513545
                                                                                                                                                                                                                                                                                                                                                                                                     Description
             Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                              Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                   Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to have a
being printed,
                                           200

1120

1126

1126

1126

1126

1126

1126

1126

1126

1126

1126

1126

1126
sequence
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                 124, Appl 124, Appl 126, Appl 126, Appl 126, Appl 126, Appl 127, Appl 131, A
 148, App

148, App

148, App

148, App

147, App

148, App

148, App

148, Appli

8, Appli

8, Appli

8, Appli

2, Appli

2, Appli

2, Appli

2, Appli

3, Appli

5, Appli

6, Appli

16, Appli

16, Appli

16, Appli

16, Appli

16, Appli

102, Appli

102, Appli

102, Appli

102, Appli

103, Appli

104, Appli

105, Appli

107, Appli

108, Appli

109, Appl
```

RESULT 1

Patent No. 6

APPLICANT:

APPLICANT:

APPLICANT: APPLICANT:

COUNTRY:

```
US-08-783-853A-84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-783-853A-84
Sequence 84, Application US/09344050
                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
PRIOR APPLICATION UNMBER: 60/029
APPLICATION NUMBER: 60/029
FILING DATE: 24-0CT-1996
ATTORNEY/AGENT INFORMATION:
NAME: Baumeister, Kirk
REGISTRATION NUMBER: 33,83
                                                                                                                                                                                                                                                                                                                                                                           TELEX:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                               ANTI-SENSE: NO FRAGMENT TYPE: ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: P5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compati
OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                             MOLECULE TYPE: p:
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: ANTICOAGULANT TITLE OF INVENTION: OF THROMBOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 709 Swederaum CITY: King of Prussia
                                                                                                                                                                                                                                                                                                                           LENGTH: 92 amino acids
TYPE: amino acid
TYPE: single
TRANSCOUNTS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 16-JAN
                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                               ch 100.0%;
1 Similarity 100.0%;
10; Conservative 0
                                                                                                                1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19406
                                                                                 GYTFTNYGMN 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PΑ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08783853A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nichols, Andrew Padlan, Eduardo Patel, Arunbhai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sylvester, Daniel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Church, William Gross, Mitchell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Feuerstein, Giora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blackburn, Michael
Church, William
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Diskette
                                                                                                                                                                                                                                                internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-JAN-1997
                                                                                                                                                                                                                                                                                                  protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/029,119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/783,853A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33,833
                                                                                                                                                                                                                                                                                                                                                                                                 84:
                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P50438
                                                                                                                                                                Score 59; DB 3; Length 92; Pred. No. 0.028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGENTS USEFUL IN TREATMENT
                                                                                                                                                  0
                                                                                                                                                 Indels
                                                                                                                                                 ٥,
                                                                                                                                               Gaps
                                                                                                                                                 0
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                ; FRAGMENT TYPE: ; ORIGINAL SOURCE: US-09-344-050-84
                                                                                                                                                  US-08-783-853A-20
                                                                                                                                                                  RESULT 3
                                                                                                              Sequence 20, Application US/08783853A Patent No. 6005091
                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6391299
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 92 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/344,050
FILING DATE: 24-JUN-1999
                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 33,833
REFERENCE/DOCKET NUMBER: P50
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-270-5096
TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 08/78
FILING DATE: 16-JAN-1997
ATTORNEY/AGENT INFORMATION:
NAME: Baumeister, Kirk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: SmithKline Beecham Corporation
STREET: 709 Swedeland Road
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Nichols, Andrew
APPLICANT: Padlan, Eduardo
APPLICANT: Patel, Arunbhai
APPLICANT: Sylvester, Daniel
TITLE OF INVENTION: ANTICOAGULANT AGENTS USEFUL IN TREATMENT
TITLE OF INVENTION: OF THROMEOSIS
NUMBER OF SEQUENCES: 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
PRIOR APPLICATION DATA:
                                  APPLICANT:
                                                                                 APPLICANT:
 APPLICANT:
                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 709 Sweugrung
CITY: King of Prussia
                                                                                                                                                                                                                                                                                 Local Similarity
les 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                      1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amino acid
                                                                                                                                                                                                                   GYTFTNYGMN 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PA
                                                                                                                                                                                                                                                                             ilarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gross, Mitchell
Feuerstein, Giora
                                              Church, William Gross, Mitchell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Blackburn, Michael
Church, William
               Nichols,
                             Feuerstein, Giora
                                                                  Blackburn, Michael
Church, William
Padlan, Eduardo
                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                           . protein
                                                                                                                                                                                                                                                                                                                                                                                internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                 Andrew
                                                                                                                                                                                                                                                                                                100.0%; Score 59; DB 3; 100.0%; Pred. No. 0.028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08/783,853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P50438
                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                               Length 92
                                                                                                                                                                                                                                                                                  Indels
```

RESULT 2 US-09-344-050-84

밁

Matches

0

Gaps

13:01:21 2005

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum |
Maximum |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 011:
                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB seq
                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein search, using
                                                                                                                                                                                                                                                               Published Applications AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06 NEW PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US06 PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/US07 NEW PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US08 NEW PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08 NEW PUB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08 PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08 PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*

12: /cgn2_6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/US09 PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*

15: /cgn2_6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10 PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10 NEW PUB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10 NEW PUB.pep:*

17: /cgn2_6/ptodata/2/pubpaa/US10 NEW PUB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US10 NEW PUB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10 NEW PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       length: 0
length: 2000000000
                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                       100.0
100.0
100.0
100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-018-245A-1
59
1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1407402 seqs, 331100923 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24, 2005, 08:56:15; Search time 57.6562 Seconds (without alignments) 57.427 Million cell updates/sec
                                                                                                                                                                Length
    10
10
10
10
70
70
70
70
92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext
                                                                                                                                                                  B
 US-09-056-160B-1
US-10-234-671-1
6 US-10-018-245A-1
6 US-10-723-434-112
6 US-10-723-434-112
6 US-10-723-43-13-19
4 US-10-243-130-17
9 US-10-243-130-17
7 US-10-901-650-18
7 US-10-901-650-18
US-09-965-099-84
US-09-965-099-84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sw model
                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                Description
Sequence 1, Appli
Sequence 1, Appli
Sequence 11, Appli
Sequence 112, App
Sequence 116, App
Sequence 19, Appl
Sequence 17, Appl
Sequence 18, Appl
Sequence 18, Appl
Sequence 18, Appl
Sequence 19, Appl
Sequence 19, Appl
Sequence 19, Appl
Sequence 84, Appl
Sequence 84, Appl
   Sequence
Sequence 8
Sequence
                                                                                                                             Sequence 1,
Sequence 1
      US-10-430-176-84
US-09-965-099-20
 Sequence 84, Appl Sequence 20, Appl Sequence 20, Appl Sequence 9, Appli Sequence 9, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 21, Appli Sequence 21, Appli Sequence 21, Appli Sequence 21, Appli Sequence 22, Appli Sequence 23, Appli Sequence 24, Appli Sequence 25, Appli Sequence 660, Appli Sequence 661, Appli Sequence 661, Appli Sequence 662, Appli Sequence 663, Appli Sequence 664, Appli Sequence 2025, Appli Sequence 2025, Appli Sequence 2025, Appli Sequence 2025, Appli Sequence 104, Appli Sequence 106, Appli Sequence 107, Appli Sequence 108, Appli Sequence 124, Appli Sequence 126, Appli Sequenc
```

```
RESULT 1
US-09-056-160B-1
                                                                                                                                                                             US-09-056-160B-1
                                                                                                        Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09056160B Patent No. US20020032315A1
                                                                                                                                                                                                                                            TELEFAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/054,856
FILING DATE: 06-AUG-1997
ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        87
88
89
90
91
92
93
94
94
95
97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wells, James A.
APPLICANT: Presta, Leonard G.
APPLICANT: Lowman, Henry B.
APPLICANT: Chen, Yvonne M.
TITLE OF INVENTION: ANTI-VEGF ANTIBODIES
NUMBER OF SEQUENCES: 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: WinPatin (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/056,160B
FILING DATE: 06-Apr-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: P1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                           LENGTH: 10 amino TYPE: Amino Acid TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      South San Francisco
                                                               GYTFTNYGMN 10
                                       GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DNA Way
                                                                                                                                                                                                                              10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Baca, Manuel
                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                  650/225-1896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Genentech, Inc.
                                                                                                        100.0%; S
100.0%; F
htive 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
13
15
15
15
15
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-965-099-31
US-09-965-099-52
US-09-965-099-11
US-09-965-099-11
US-10-051-852-7
US-10-051-852-31
US-10-051-852-111
US-10-051-852-111
US-10-430-176-7
US-10-430-176-52
                                                                                                                                                                                                                                                                                                                                     P1093R2
                                                                                                                       Score 59; DB 9; Length 10; Pred. No. 0.0038;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ALIGNMENTS
                                                                                                            Mismatches
                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 31, Appl
Sequence 52, Appl
Sequence 7, Appli
Sequence 7, Appli
Sequence 52, Appli
Sequence 52, Appli
Sequence 111, Appli
Sequence 111, Appli
Sequence 31, Appli
Sequence 52, Appli
Sequence 114, Appli
Sequence 115, Appli
                                                                                                          0
                                                                                                        Gaps
                                                                                                          0
                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-10-234-671-1
                                                                                                                                                                                                            US-10-018-245A-1
                                                                                                                                                                                                                                RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-234-671-1
                                                                                                                                                       Sequence 1, Application US/10018245A Publication No. US20040115196A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/10234671 Publication No. US20030190317A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                       Matches 10;
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
APPLICANT: FUKUDA, Yoshiaki
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAKANISHI, Toshihiro
APPLICANT: NAKANISHI, Toshihiro
TITLE OF INVENTION: determining regions and genes encoding the same
FILE REFERENCE: 46224
CURRENT FILING DATE: 2002-07-12
PRIOR APPLICATION NUMBER: US/10/018,245A
CURRENT FILING DATE: 2002-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: 650/225-8674
TELEPAX: 650/952-9881
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: 09/056160

RILING DATE: 06-APR-1998

APPLICATION NUMBER: 60/126446

FILING DATE: 07-APR-1997

APPLICATION NUMBER: 60/054856

FILING DATE: 06-AUG-1997

ATTORNEY/AGENT INFORMATION:

NAME: Cui, Steven X.

REGISTRATION NUMBER: 44,637

REFERENCE/DOCKET NUMBER: P1093R2C1

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: WinPatin (Genentech)

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/234,671

FILING DATE: 03-Sep-2002

CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: Linear SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: ANTI-VEGF ANTIBODIES NUMBER OF SEQUENCES: 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Baca, Manuel
                                                                                                                                                                                                                                                                                                      1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                  GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: Amino Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: South San
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Presta, Leonard
Lowman, Henry B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wells, James A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 DNA Way
1 can Francisco
                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genentech, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yvonne M.
                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                   Score 59; DB 14;
Pred. No. 0.0038;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဂ္
                                                                                                                                                                                                                                                                                                                                                       Mismatches
```

DB 14;

Length 10; Indels

0

Gaps

0

108

complement

13:01:21 2005

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
     Pred. No. is the number of score greater than or equal and is derived by analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
BC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   score:
                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq
     of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-018-245A-1
59
1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                  %
Query
Match
    1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
1000.0
10
                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR_79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum
Maximum
Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                283416 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10.0
                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         n Match 0%
n Match 100%
g first 100 g
    2005, 08:54:17; Search time 14.0625 Seconds (without alignments) 68.421 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                   DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96216763
  C24672
S26325
S24764
S24764
S24764
S24764
S24764
S24764
S24325
S19968
S19967
A53285
S19967
A53285
S19967
A53285
S19967
A53285
S19967
A53285
S19967
A53285
PH1488
PH1489
PH1489
PH1489
PH1521
PH1489
PH1516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  results predicted by chance to have a l to the score of the result being printed, of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   residues
Ig heavy chain V r
                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                | 1
| CARTINE | 
                                9415555
A24754
PH1501
PH1510
PH1510
PH1510
PH1510
PH1510
PH1500
PH1600
                           Ig heavy chain V r
```

ALIGNMENTS

0;

```
Ig heavy chain V region (VGAM3-8) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 23-Jul-1999 C;Accession: D24672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:X03300; NID:g52375; PIDN:CAA27039.1; PID:g773221 A;Note: this sequence was determined from the differentiated gene C;Superfamily: immunoglobulin V region; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ig heavy chain V region (VMU-1) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 23-Jul-1999
A;Cross-references: GB:X03301; NID:g51757; PIDN:CAA27040.1; PID:g773215 A;NOte: this sequence was determined from the differentiated gene C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                             R;Winter, E.; Radbruch, A.; Krawinkel, U.
EMBO J. 4, 2861-2867, 1985
A;Reference number: A91022; MUID:86055722; PMID:2998759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Exp. Med. 174, 613-624, 1991
J. Exp. Med. 174, 613-624, 1991
A;Title: Antibodies that are specific for a single amino
A;Reference number: $26309; MUID:91341421; PMID:1908510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: immunoglobulin V region; imm
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Accession: C24672
R;Winter, E.; Radbruch, A.; Krawinkel,
                                                                                             A; Molecule type: DNA
A; Residues: 1-101 <WIN>
                                                                                                                                                                                                                                                                                                                                                                                                                                    뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-99 <STA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S26326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ig heavy chain V region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1998 #sequence_revision 19-Mar-1998 #text_change 17-Apr-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-93 <WIN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: C24672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: A91022; MUID: 86055722; PMID: 2998759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBO J. 4, 2861-2867,
                                                                                                                                            A; Accession: D24672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Superfamily: immunoglobulin V region; immunoglobulin homology; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession: S26326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: EMBL:X59174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                    σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 100.0%; Score 59; DB 2;
Similarity 100.0%; Pred. No. 0.0019
10; Conservative 0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                    GYTFTNYGMN 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GYTFTNYGMN 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 59; DB 2;
Pred. No. 0.0018;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ۵.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 93,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acid interchange in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ա
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Klages
```

Query Match

100.0%;

Score 59;

DB 2;

Length 101;

```
R;Thomas, J.W.
submitted to the EMBL Data Library,
A;Reference number: S24776
A;Accession: S24777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            submitted to the EMBL Data Library, August 1992
A;Reference number: S24763
A;Accession: S24764
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig heavy chain V region (subgroup XI) - mouse (fragment) C;Species: Mus musculius (house mouse) C;Date: 20-Feb-1995 #sequence revision 21-Nov-1998 #text C;Accession: S24765; S24773; S24778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Superfamil
C;Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig heavy chain V region (subgroup XI) - mouse (fragment) c;Species: Mus musculus (house mouse) C;Date: 20-Feb-1955 #sequence revision 21-Nov-1998 #text C;Accession: S24764; S24772; S24777
                     A; Introns:
                                             C;Genetics:
                                                            A;Molecule type: DNA
A;Residues: 1-105 <THO>
A;Cross_references: EMBL:Z15022; NID:g52619; PIDN:CAA78741.1; PID:g52620
                                                                                                                         submitted to the EMBL Data Library, A;Reference number: S24776 A;Accession: S24778
                                                                                                                                                                                           R;Thomas,
                                                                                                                                                                                                          A;Molecule type: DNA
A;Residues: 1-105 <KLW>
A;Cross-references: EMBL:Z15013
                                                                                                                                                                                                                                                                             A; Accession:
                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-105 < KLA>
                                                                                                                                                                                                                                                                                                                                                            A; Reference number: A; Accession: S24765
                                                                                                                                                                                                                                                                                                                                                                               submitted to the EMBL Data Library, August 1992 A;Reference number: S24763
                                                                                                                                                                                                                                                                                                                                                                                                                             R;Klages,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Genetics:
A;Introns: 9/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-105 <THO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-105 <KLW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type:
                                                                                                                                                                                                                                                                                               A;Cross-references: EMBL:Z15001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;Cross-references: EMBL:Z14999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cross-references: EMBL:Z15020; NID:g52616; PIDN:CAA78739.1; PID:g52617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Superfamily: immunoglobulin V region; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references: EMBL:Z15011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Accession: S24772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 100.0%;
les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1-105 <KLA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10; Conservative
                                                                                                                                                                                                                                                                             S24773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GYTFTNYGMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GYTFTNYGMN 16
immunoglobulin V region; immunoglobulin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 59;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.
                                                                                                                                                                   August 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           August 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-Nov-1998 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-Nov-1998 #text_change 23-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.0019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-Jul-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
```

```
Thu
Mar
```

24 13:01:21 2005

Minimum Maximum Database Total number of hits satisfying chosen parameters: Scoring table: Sequence: Perfect Run Post-processing: OM protein -8 Pred. N score g and is 80 80 score: seq No. greater than or equal to the score greater than or equal to the total protein search, using length: is the number of results predicted by chance to have ater than or equal to the score of the result being pu UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* US-10-018-245A-1 59 1612378 seqs, Gapop 10.0 , BLOSUM62 March Minimum Match 0% Maximum Match 100% Listing first 100 GYTFTNYGMN 10 Copyright 24, 0 20000000000 2005, 08:54:17; Search time 65.9375 Seconds (without alignments) 77.661 Million cell updates/sec GenCore version 5.1.6 (c) 1993 - 2005 Compugen Gapext 512079187 residues summaries W8 0.5 SUMMARIES model score distribution. Ltd 1612378 printed, 0 $\begin{array}{c} \mathbf{A} & \mathbf{$ HY50 MOUSE
HY57 MOUSE
HY67 MOUSE
HY68 MOUSE HV49 MOUSE Q920E7 Q991A6
Q802I7
Q802I7
HV01 MOUSE
Q6N041
Q82N96
Q90190
HV04 MOUSE
HV05 MOUSE
HV06 MOUSE
HV09 MOUSE
HV09 MOUSE

Result No. Score □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □
 □ Query Match .77222222222222444688.000 Length DB Q9GYZ2
Q99L74
Q99L79
PHV35_MOUSE
HV27_MOUSE
HV29_MOUSE
HV31_MOUSE
HV31_MOUSE Q921A6
HV03_MOUSE
HV02_MOUSE
Q6PIL0
HV59_MOUSE
HV3J_HUMAN Q925S2 Q7ND50 Q6MZQ6 Q920E8 Q96QS0 Q91WT3 Q6PDB8 HV51_M MOUSE MOUSE P18530 P18530 P01771 P01771 P01771 P05330 O5piwt3 O5pj179 P01804 P01797 P01797 P011798 P011799 P011799 P011799 P011799 P011799 P011799 P011799 P011803 P011803 P011803 P011799 P011799 P011803 P011799 P011803 P011799 P011799 P011799 P011799 P011803 P011799 P01179 P01179 P01179 P01179 P01179 P01179 P01179 P01179 P01179 Q921a6 P01747 Description 7 mus musculu
8 mus musculu
9 mus musculu
1 mus musculu
1 mus musculu
2 mus musculu
2 mus musculu
8 mus musculu
8 mus musculu
9 mus musculu
1 mus musculu
9 mus musculu 0 mus musculu
3 mus sp. tgl
2 schistosoma
4 mus musculu
9 mus musculu
4 mus musculu
6 mus musculu 0 mus musculu
1 homo sapien
0 homo sapien
3 mus musculu
8 mus musculu mus mus musculu homo sapien musculu musculu

> Q6x2p6
> Q6x2p9
> Q6x2q0
> Q9ap60
> Q9ap61
> Q9ap61
> Q9ap62
> Q9ap63
> Q7tqm2 0.65xc9 0.665xc9 0.7urz8 0.7urz8 0.9u814 0.9u8172 0.8k172 0.8k40b9 0.9u1175 0.9u1175 0.9u11761 0.9u1161 0.9u1161 0.9u1449 0.9u1449 0.9u1449 0.9u1449 0.9u1449 0.9u1449 0.9u1449 0.9ur2449 P011749
> P011749
> P011750
> P01244
> P016328
> P016328 Q991a6 Q80zi7 P01745 Q6n041 Q82n96 Q9u190 o uncultured a uncultured of uncultured 8 mus musculu
> 9 homo sapien
> 6 uncultured
> 7 uncultured
> 8 uncultured
> 9 uncultured 1 homo sapien 8 homo sapien 4 homo sapien 2 mus musculu 9 mus musculu mus musculu homo sapien mus musculu mus musculu mus musculu mus musculu cellvibrio mus musculu
> mus musculu
> homo sapien
> mus musculu
> rhodopirell mus musculu
> mus musculu
> homo sapien
> streptomyce
> homo sapien
> mus musculu mus musculu mus musculu mus musculu s musculu musculu musculu musculu musculu musculu musculu musculu musculu musculu

Q6X2N8 Q6X2P0 Q6X2P0 Q6X2P4 Q6X2P6 Q6X2P9 Q6X2Q0 Q9AP60 Q9AP60 Q9AP61 Q9AP61 Q9AP63 Q9AP63 Q9AP63 Q9AP63 Q9AP63 Q9AP63

```
RESULT 2
HV03_MOUSE
ID HV03_MOUSE
P01747;
P01747;
19/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOUR BEAUTION OF THE PROPERTY 
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q921A6
Q921A6;
Q1-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=98170165; PubMed=9509426; Chung J.H., Choi S.J., Kim H.J., Kim I.J., Choi I.H., Lee S.D., Chung J.H., Choi S.J., Kim H.J., Kim I.J., Choi I.H., Lee S.D., Yi K.S., Suh P.G., Ryu S.H., Chung H.K.; "Cloning and characterization of cDNAs encoding VH and VL of a monoclonal anti-CEA antibody (CEA 79) cross-reactive with NCA-95 generation of a single-chain FV molecule (scFV)."; Mol. Cells 7:816-819(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence up
01-MAR-2004 (TrEMBLrel. 26, Last annotation
Anti-CEA 79 single chain Fv (Fragment).
Nus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; U88067; AABA8044.1; -.
PIR; S19965; S19965.
PIR; S19967; S19967.
PIR; S19968; S19968.
PIR; S26325; S26325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10090;
                                                                                                                                                                                                                              Eur.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ig heavy chain V reg
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                   Pfam; PF00047;
                                 PDB; 1JFQ; X-ray; H=1-120.
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                  Marshak-Rothstein A.;
                                                                                                                                                                                                                                                                                                                     MEDLINE=83131846; PubMed=6: Siekevitz M., Gefter M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-JUL-1986 (Rel. 01,
21-JUL-1986 (Rel. 01,
25-OCT-2004 (Rel. 45,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ñ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS50835; IG_LIKE;
                                                                                                                                                                                                                              didiotype response of the strain A nur. J. Immunol. 12:1023-1032(1982)
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                  MISCELLANEOUS: From analysis of the sizes of several differentiated genes that hybridize to this one, the conclude that all of these V regions have rearranged segment, JH2.
                                                                                                          segment, JH2.
SIMILARITY: Contains 1 immunoglobulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TER
                                                                                                                                                                                                                                                                            genetic basis of antibody production:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SM00406; IGV; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GYTFTDYGMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1BWW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                V region 36-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                          PubMed=6186498;
ter M.L., Brodeur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26086 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91.5%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ν.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 54; DB 2
Pred. No. 0.13;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0276887248E9C771 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                       mouse.";
                                                                                                                                                                                                                                                                                                                     ₽.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   on update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120 AA
                                                                                                                                                                                                                                                                                                                          Riblet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   update)
                                                                                                                                                                                                                                                                            the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           update)
                                                                                                                                                                                                                                                                                                                        ₽;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 241;
                                                                                                               domain
                                                                                                                                                                                                                                                                            dominant anti-arsonate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murinae; Mus.
                                                                                                                                                          to the
                                                                                                                                                                                                    other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
O PETER REPRESENTATION OF THE PROPERTY AND THE PROPERTY A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SATER
  밁
                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                    Matches
                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOMAIN
NON_TER
                                                                                                                                                                                                                                                                                                                     InterPro; IPR007110; I
InterPro; IPR003596; I
Pfam; PF00047; ig; 1.
SMART; SM00406; IGv; 1
                                                                                                                                                                   DOMAIN
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS50825; IG LIKE; 1.
3D-structure; Hybridoma; Immunoglobulin V region DOWAIN 1 111 Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=82152818; PubMed=6801765; Sims J., Rabbitts T.H., Estess P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN=A/J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P01746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HV02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Science
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Capra J.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1986
10-OCT-2003
                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                         SIGNAL
                                                                                                                                                                                                                                                                           PROSITE; PS50835; IG LIKE;
Hybridoma; Immunoglobulin V
                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; J00493; AAA381
PIR; A94264; HVMSG7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- SIMILARITY: Contains 1 immunoglobulin-like domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-OCT-2003 (Rel. 42, La
Ig heavy chain V region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1986
                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P01747; 1JFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mmunoglobulin heavy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Somatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
8; Conserv
                                       ш
                                                                                 Similarity
8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         216:309-311(1982)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mutation in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GYTFTNYGMN
                                       GYTFTNYGMN 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GYTFTSYGIN
  GYTFTSYGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
120 AA;
                                                                                                                                                                   140
140 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Rel. 01, Last sequence up
(Rel. 42, Last annotation
                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA38128.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01, Created)
                                                                                                                                                                                                                  19
140
139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13307
  54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84.7%;
                                                                                                                                                                   15514 MW;
                                                                                                                                                                                                                                                                                                                                                           Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genes for
                                                                                                     84.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chain.";
                                                                                                                                                                                                                                                                                                                                                                                   Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Estess P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93G7 precursor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ¥.
                                                                                                                                                                                                                                                                                <
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 50; DB Pred. No. 0.33 2; Mismatches
                                                                                 Score 50; DB
Pred. No. 0.38
2; Mismatches
                                                                                                                                                                                                                                                                             region;
                                                                                                                                                                                                           Ig heavy chain V region 93G7 Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ig-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FF04E4A167B654AF CRC64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                     25A4CBBE31DA5CE8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the variable portion of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Slaughter C.,
                                                                                                                                                                                                                                                                             Signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.33;
                                                                                                       DB 1;
0.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 120;
                                                                                                                         Length 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tucker P.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                    0
```

RESULT 4 Q6PIL0 ID Q6PIL0

PRELIMINARY;

PRT;

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
                                                                                                                                                                                                                                                                                                                Pred. No. is the nuscore greater than and is derived by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
DB
                                                                                                                                                                                                                                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq
1001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-018-245A-2
101
1 WINTYTGEPTYADDF
                                                                                                                                                                                                                                                                                                                                                         1000.
1000.
1000.
1000.
1000.
1000.
1000.
1000.
1000.
1000.
                                                                                                                                                                                                                                                               Query
Match
                                                                                                                                                                                                                                                                                                                 is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    March
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                      A_Geneseq_16Dec04:*
: geneseqp1980s:*
geneseqp1990s:*
: geneseqp2000s:*
: geneseqp2001s:*
: geneseqp2002s:*
: geneseqp2003bs:*
: geneseqp2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seqs,
 2005, 08:54:17; Search time 129.094 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext
                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386760381
AAG80312
AAD887337
AAY1749
AAY1749
AAY1749
AAH62638
ADH62638
ADC27441
ADC27441
ADC27441
ADC27449
AAB84740
AAB827839
AAB27839
AAB27833
                                                                                                                                                                                                                                                                                                                                                                                                                                                              summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5
                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ltd
                                                                                                                                         Aay17490
Aay08699
Aay83642
Adh62639
Adh62638
Adc27449
Aab84740
Aab84739
Aae27825
Aae27826
Aae27828
Aae27834
Aae27834
Adg67541
Adg67537
Adg67533
Adg67533
                                                                                                           Aae27839
Aae27837
                                                                                                                     Aae27830
Aae27839
                                                                                                                                                                                                                                   Aag80312
Ads87337
                                                                                                                                                                                                                                                                Description
Human coll
Biotin la
Biotin la
Biotin la
Biotin la
Mouse ant
Mouse ant
TMEFF2#21
Variable
Variable
Variable
Variable
Mouse KS
Mou
                                                                                                                                                                                                                                   Anti-huma
Humanised
  $5.50 $6.66 $6.70 $7.71 $7.71 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72 $7.72
```

Aae33444 Aao30910 Aab351011 Aap82938 Aap82938 Aap82939 Aap82939 Aap94778

Aaw58516 Aaw58506

Low-risk Humanised Protein S H65 prote Murine an

Aab36825 Abr615218 Abr61525 Abr61529 Abr61527 Aau72872 Aau72874 Aau72873 Aau72873 Aau72873 Aau72873

Aaw47518 Aaw89536 Aab98087 Adc65008 Aab12562

Aaw10586 Aaw16341 Aaw41068 Aaw47511 Abu58898 Ads87374 Adn16154 Aab20433 Adg32324 Adg3232324 Adg32323

KS antibo

KS antibo

KS antibo

Murine KS

Murine MI

Mouse C7

Anti-HLA

KM10 Heavy cha

Chimeric

Murine KS

Anti-HLA

KM10 Heav

Mouse SCF

Precursor

Precursor

Mouse SCF

Mouse SCF

Mouse SCF

Mouse SCF

Mouse L6

Adg32361 Aap93037 Aar09428 Aaw06217 Aaw85064

Abr62341

Aab98664 Aay17495 Aae29158

Ads87366

Aag80317 Aae33439 Aar25414 Adn16150 Aab11995 Aao23065 Ads87370

Aae33436 Aao30908 Aao30911 Aar28752

Aae33432 Aae33438 Aae33430 Aae33437

Aae33435 Aae33414

Aae33434

Adg67529 Adg67535 Aae33431 Aae33433

```
RESULT 2
ADS87337
ID ADS8
XX
AC ADS8
                                                                                                       멹
                                                                                                                               Ś
                                                                                                                                                                                                                        Matches
                                                                                                                                                                           Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                              This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factor-humans. This sequence represents the anti-human tumour necrosis factor-humans (TNF-alpha) heavy chain CDR1 designated CDR-H2
    ADS87337;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
                              ADS87337 standard; peptide; 17 AA
                                                                                                                                                                                                                     Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel heavy and light-chain polypeptides of chimeric and antibodies against human tumor necrosis factor alpha for immunogenicity treatment of TNF-related diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAG80312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAG80312 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fukuda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-human TNF-alpha CDR-H2
                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96
                                                                                                                                                                           Similarity
                                                                                                                                WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                              Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nagahira K,
                                                                                                                                                                                                                        A
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95.0
95.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                           25; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  118
                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakanishi T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ထထ
                                                                                                       17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADI01229
ADI01170
                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide
                                                                                                                                                            Score 101; DB 5;
Pred. No. 2.4e-08;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                                                                                                                                                         Length 17;
                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Adi01229 Murine mo
Adi01170 Murine mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      low-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    humanized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          toxic shock
                                                                                                                                                               0,
                                                                                                                                                               Gaps
                                                                                                                                                               0
```

RESULT 3
AAY17490
ID AAY1
XX
AC AAY1
XX
DT 03-A
XX
DE Mab
XX
KW Heav
KW 1igh

03-AUG-1999

(first entry)

AAY17490 standard; peptide;

19

₿

Heavy chain light chain

variable region; 2CAVHCOL1; light chain variable consensus region; heavy chain consensus region; a

Mab 31.1 CDR sequence derived peptide COL311 H2

밁

Matches Query Match Best Local S

μ

WINTYTGEPTYADDFKG 17 WINTYTGEPTYADDFKG

17

ch 100.0%; 1 Similarity 100.0%; 17; Conservative 0

0

Score 101; DB 8; Pred. No. 2.4e-08; ; Mismatches 0;

Length 17; Indels

0

Gaps

0

```
The invention relates to a monoclonal antibody (Mab) (I) or its fragment that binds NCA90 or NCA95, where when the Mab or its fragment binds NCA90 the Mab or its fragment is chimeric, partially humanized or fully humanized and where when the Mab or its fragment binds NCA95 the Mab or its fragment is either fully humanized or chimeric, partially humanized or fully humanized BM 250/183. (I) is useful for treating, detecting or imaging sites of inflammation resulting from appendicitis, inflammatory bowel disease, pelvic inflammatory disease, fever and cystic fibrosis and treating granulocyte related disorders, atherosclerosis and infarction. (I) is useful for detecting or treating cancer or ischemic lesion. This sequence corresponds to the complementarity determining region 2 (CDR2) of the heavy chain of the antibody of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; vasotropic; antimicrobial; antiinflammatory; antipyretic; antiatherosclerotic; cardiant; monoclonal antibody; NCA90; NCA95; chimeric antibody; humanized antibody; inflammation; appendicitis; inflammatory bowel disease; pelvic inflammatory disease; fever;
Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Monoclonal anti-granulocyte antibody that binds NCA90 and NCA95 antigens, useful for treating malignancy, inflammation, atheroscierosis, infarction, or other granulocyte related disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-NOV-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Goldenberg DM, Hansen H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-SEP-2002; 2002US-0414341P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-SEP-2003; 2003WO-GB004229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004029093-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Humanised antibody MN3 heavy chain variable region CDR2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 105; 134pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           infarction; cancer; ischemic lesion; complementarity determining region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cystic fibrosis; granulocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IMMU-) IMMUNOMEDICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ġ.
    AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Leung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            related disorder; atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ß
```

13:01:22

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum
Maximum
Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             on:
  Pred.
score
and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
BG
                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                            į.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq
                                                                                                                                                                                                                                                                                                                                                                                                    No. is t
  derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length:
                                                                                                                                                                                                                                                                                                                                  Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-018-245A-2
101
                                                                                                                                                                                                                                                                                                                                                                                                                                      Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             March
   WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                                                                                                                                                                                                                                                                         the number of results predicted by chance to have a r than or equal to the score of the result being printed, ed by analysis of the total score distribution.
                                                           0000000000000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24, 2005, 08:57:11 ; Search time 34.2656 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      n Match 0%
n Match 100%
g first 100 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74649064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext
  summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       version
                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
 9-318-786-35

8-279-772A-6

8-902-486-9

8-425-336-124

8-488-1133-124

8-488-1133-124

8-107-669D-29

8-107-669D-29

8-107-669D-29

8-472-788A-29

8-472-788A-29

8-472-788A-29

8-477-531B-29

8-477-76

8-569-147-76

8-569-147-82

8-569-147-82

8-575-811-55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compugen
                                                                                                                                                                                                                                                                                                                                   Description
sequence
                                                                                                                                                                                                                                                                                                          Sequence
35 Appl
9 Appli
124 App
1124 App
1124 App
1124 App
128 Appl
129 Appl
28 Appl
28 Appl
28 Appl
28 Appl
29 Appl
28 Appl
29 Appl
28 Appl
29 Appl
214 Appl
29 Appl
20 Appl

   US-09-184-658-32
US-09-504-262D-32
US-09-194-658-47
US-09-194-658-47
US-09-194-658-47
US-09-504-262D-40
US-09-504-262D-40
US-09-504-262D-40
US-09-504-25290-50
US-08-48-113B-126
US-08-48-113B-126
US-08-48-113B-148
US-08-48-13B-1485-126
US-08-48-13B-1485-126
US-08-48-13B-1485-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-126
US-09-136-389-127
US-08-488-13B-148
US-09-136-389-147
US-08-488-13B-148
US-09-136-389-149
US-09-136-389-149
US-09-136-389-149
US-09-136-389-149
US-09-136-389-149
US-09-485-737B-91
US-09-485-737B-91
US-09-485-737B-91
US-09-485-737B-91
US-09-485-737B-91
US-09-440-781-98
US-09-440-781-99
US-10-071-485-92
US-08-461-1848-6
US-08-461-386-2
US-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
  sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
  32, Appl
115, Appl
47, Appl
47, Appl
40, Appl
40, Appl
126, Appl
126, Appl
127, Appl
128, Appl
129, Appl
120, Appl
120, Appl
120, Appl
121, Appl
121, Appl
122, Appl
133, Appl
134, Appl
135, Appl
136, Appl
137, Appl
138, Appl
139, Appl
139, Appl
130, Appl
1
```

ALIGNMENTS

```
US-08-279-772A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: ; OTHER INFORMATION: polypeptide US-09-318-786-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-318-786-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Janda, Kim D
APPLICANT: Wirsching, Peter
APPLICANT: Wirsching, Peter
APPLICANT: Lerner, Richard A
APPLICANT: Lerner, Richard A
APPLICANT: Gao, Changshou
TITLE OF INVENTION: METHODS FOR DISPLAY OF HETERODIMERIC PROTEINS
TITLE OF INVENTION: FILAMENTOUS PHAGE USING DVI AND DIX, COMPOSIT
TITLE OF INVENTION: VECTORS AND COMBINATORIAL LIBRARIES
FILE REFERENCE: TSRO305S
FILE REFERENCE: TSRO305S
CURRENT APPLICATION NUMBER: US/09/318,786
CURRENT FILING DATE: 1999-05-25
NUMBER OF SEQ ID NOS: 39
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6, Application US/08279772A
Patent No. 6080560
GENERAL INFORMATION:
APPLICANT: Russell, David R
APPLICANT: Fuller, James T
TITLE OF INVENTION: Method for P:
TITLE OF INVENTION: Cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 35, Application US/09318786 Patent No. 6472147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 160
TYPE: PAT
TYPE: PAT
ORGANISM: Artificial Sequence
FEATURE:
ATTORNEY/AGENT INFORMATION:
NAME: Seay, Nicholas J.
REGISTRATION NUMBER: 27,386
REFERENCE/DOCKET NUMBER: 11-229-9097-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 608-251-5000
                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of COMPUTER: IBM PC com
                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Quarles a
                                                                                                                       FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                          ZIP: 53701-2113
                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52 WINTYTGEPTYADDFRG 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                                                  Madison
                                                                                                                                                                                                                                                                                                                                                    H.
                                                                                                                                                                                                                                                                                                                                                                                            PO Box 2113
                                                                                                                                                                                                                                                                                                                               United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            Quarles and Brady
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method for Producing Antibodies in Plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.0%;
94.1%;
                                                                                                                                                                   US/08/279,772A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 98; DB 4;
Pred. No. 1.8e-07;
1; Mismatches (
                                                                                                                                                                                                         Version
                                                                                                                                                                                                         #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       fusion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPOSITIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

RESULT 4 US-08-425-336-124

Sequence 124, Application US/08425336 Patent No. 5621083 GENERAL INFORMATION:

GENERAL INFOF APPLICANT:

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
밁
                           S
                                                                                                                      ; MOLECULE TYPE: protein US-08-902-486-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-902-486-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-279-772A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 9, Approximately No. 614007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches' 16; Conserv
                                                            Matches
                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 252 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Russel
APPLICANT: Fuller
                                                                                                                                                                                                                   TELEFAX: 608-251-9166
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 252 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 67
TELECOMMUNICATION INFORMATION:
TELEPHONE: 608-251-5000
                                                                                                                                                                                                                                                                                          CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Seay, Nicholas J.
REGISTRATION NUMBER: 27386
                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                          Local Similarity
nes 16; Conserv
                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: US
ZIP: 53701-2113
                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Madison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Quarles & Brady
STREET: 1 South Pinckney Street
180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180 WINTYTGOPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 WINTYTGEPTYADDFKG 17
                             1 WINTYTGEPTYADDFKG 17
WINTYTGOPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Russel,
                                                                                                                                                       linear
                                                                          97.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , David R.
, James T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97.0%;
94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               METHOD FOR PRODUCING ANTIBODIES AND PROTEIN TOXINS IN PLANT CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08902486
                                                                                                                                                                                                                                                                                                                                                                          US/08/902,486
196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 98;
Pred. No.
                                                                          Score 98; DB 3;
Pred. No. 2.9e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 3;
                                                                                         Length 252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                             0
```

Thu Mar

24

13:01:22

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                              Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92.
                                                                                                                                                                                                Pred. No. score grea and is dea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
Bd
                                                                                                                                               Score
                                                                                                                                                                                                d. No. is the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length: 0
seq length: 2000000000
   10111011101110111011101110111011101110111011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of.
                                                                                                                                                                                                                                  Published Applications AA:*

1: /cgm2_6/ptcdata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgm2_6/ptcdata/2/pubpaa/PCT_NEW_PUB.pep:*

3: /cgm2_6/ptcdata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgm2_6/ptcdata/2/pubpaa/US06_PUBCOMB.pep:*

5: /cgm2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgm2_6/ptcdata/2/pubpaa/US07_NEW_PUB.pep:*

7: /cgm2_6/ptcdata/2/pubpaa/US08_NEW_PUB.pep:*

9: /cgm2_6/ptcdata/2/pubpaa/US08_PUBCOMB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US09_PUBCOMB.pep:*

11: /cgm2_6/ptcdata/2/pubpaa/US09B_PUBCOMB.pep:*

12: /cgm2_6/ptcdata/2/pubpaa/US09B_PUBCOMB.pep:*

13: /cgm2_6/ptcdata/2/pubpaa/US09_NEW_PUB.pep:*

14: /cgm2_6/ptcdata/2/pubpaa/US10B_PUBCOMB.pep:*

15: /cgm2_6/ptcdata/2/pubpaa/US10B_PUBCOMB.pep:*

16: /cgm2_6/ptcdata/2/pubpaa/US10B_PUBCOMB.pep:*

16: /cgm2_6/ptcdata/2/pubpaa/US10B_PUBCOMB.pep:*

16: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

18: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

18: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

19: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

19: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*

10: /cgm2_6/ptcdata/2/pubpaa/US10B_PUB.pep:*
                                                                                                                                              Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-018-245A-2
101
1 WINTYTGEPTYADDI
            100.
100.
100.
100.
100.
100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1407402 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    March 24, 2005, 08:56:15 ; Search time 98.0156 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Copyright
                                                                                                                                               Length
   17
17
67
70
70
70
70
70
112
112
1112
1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext
                                                                                                                                               BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   331100923
                                                                                                                                               IJ
   S-09-791-551-86
S-10-018-245A-2
S-10-243-130-19
S-10-243-130-17
S-10-243-130-18
S-10-901-650-19
S-10-901-650-19
S-10-901-650-19
S-10-901-650-19
S-10-901-650-19
S-10-138-727A-18
S-10-138-727A-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (without alignments)
57.427 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ltd
                                                                                                                                             Description
 sequence
86. Appl
2, Appli
19, Appli
17, Appl
18, Appl
18, Appl
11, Appl
11, Appl
110, Appl
     US-10-138-727A-20
US-10-138-727A-21
US-10-138-727A-21
US-10-138-727A-23
US-10-138-727A-23
US-10-138-727A-23
US-10-138-727A-24
US-10-138-727A-26
US-10-138-727A-26
US-10-138-727A-26
US-10-468-370-66
US-10-468-370-666
US-10-468-370-666
US-10-468-370-672
US-10-468-370-673
US-10-268-883-3
US-10-268-883-3
US-10-268-883-3
US-10-268-883-3
US-10-268-883-3
US-10-268-883-3
US-10-268-883-3
US-10-377-121-9
US-10-380-189-9
US-10-377-121-9
US-10-380-189-9
US-10-377-121-9
US-10-380-189-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-377-121-9
US-10-380-189-9
US-10-377-121-9
US-10-380-9
US-10-380-9
US-10-380-9
US-10-380-9
US-10-380-9
US-10-380-9
US-10-3
 Sequence 20, Appl
Sequence 21, Appl
Sequence 22, Appl
Sequence 22, Appl
Sequence 26, Appl
Sequence 26, Appl
Sequence 30, Appl
Sequence 660, Appl
Sequence 660, Appl
Sequence 660, Appl
Sequence 661, Appl
Sequence 662, Appl
Sequence 663, Appl
Sequence 664, Appl
Sequence 670, Appl
Sequence 2022, Appl
Sequence 2023, Appl
Sequence 2023, Appl
Sequence 2031, Appl
Sequence 2031, Appl
Sequence 2033, Appl
Sequence 2031, Appl
Sequence 2033, Appl
Sequence 2033, Appl
Sequence 2033, Appl
Sequence 214, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 29, Appl
Sequence 216, Appl
Sequence 217, Appl
Sequence 218, Appl
Sequence 218, Appl
Sequence 219, Appl
Sequence 210, Appl
Sequence 2100, Appl
Sequence 2100, Appl
Sequence 2100, Appl
Seq
```

```
Sequence 86, Application US/09791551

Publication No. US20030235584A1

GENERAL INFORMATION:
APPLICANT: KLOETZER, WILLIAM S.
APPLICANT: HANNA, NABIL
TITLE OF INVENTION: METHOD FOR PREPARING ANTI-MIF ANTIBODIES
FILE REFERENCE: 037003/0277869

CURRENT APPLICATION NUMBER: US/09/791,551

CURRENT FILING DATE: 2001-02-26
PRIOR APPLICATION NUMBER: 60/185,390
PRIOR FILING DATE: 2000-02-28

PRIOR FILING DATE: 2000-09-18

PRIOR FILING DATE: 2000-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-018-245A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Mus sp. US-09-791-551-86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-791-551-86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
                                               NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 17
                                                                                                                                                                                                                                                    Sequence 2, Application US/10018245A
Publication No. US20040115196A1
GENERAL INFORMATION:
APPLICANT: FUKUDA, Yoshiaki
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAKANISHI, Toshihiro
TITLE OF INVENTION: Novel recombinant antibody, amino acid sequences of its complementing preserves. ACCOMPANY ACCOM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 119
SOFTWARE: PATENTIN VER. 2.1
SEQ ID NO 86
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                               PRIOR APPLICATION NUMBER: JP 117394/2000 PRIOR FILING DATE: 2000-04-19
                                                                                                                                                                                           FILE REFERENCE: 46224
CURRENT APPLICATION NUMBER: US/10/018,2452
CURRENT FILING DATE: 2002-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98
98
98
98
98
98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: mouse FEATURE:
                                         TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88888888999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88.11
88.11
88.11
88.11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123
235
235
240
2465
465
465
465
465
711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 101; DB 10; 100.0%; Pred. No. 1.6e-08; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-723-434-106
US-10-071-485-102
US-10-071-485-91
US-10-071-485-91
US-10-071-485-2
US-10-404-724-8
US-10-404-724-8
US-10-816-276-4
US-10-816-276-19
US-10-971-485-67
US-10-071-485-67
US-10-071-485-90
US-10-138-727A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     106, App
102, Appl
93, Appl
91, Appl
91, Appl
91, Appl
102, Appl
103, Appl
104, Appl
105, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: MOR-130
CURRENT APPLICATION NUMBER: US/10/243,130
CURRENT FILING DATE: 2002-09-13
PRIOR APPLICATION NUMBER: 09/707,468
PRIOR APPLICATION NUMBER: 09/707,468
PRIOR FILING DATE: 2000-11-07
NUMBER OF SEQ ID NOS: 22
SOFTWARE: PatentIn version 3.2
SEQ ID NO 19
LENGTH: 67
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-243-130-19
; Sequence 19, Application US/10243130; Publication No. US20030143682A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: CDR-H2 of anti-human TNF-alpha antibody US-10-018-245A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                      ; LENGTH: 70
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-243-130-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
US-10-243-130-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Consensus sequence US-10-243-130-19
                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Nicolaides, Nicholas
APPLICANT: Grasso, Luigi
APPLICANT: Sass, Philip M.
                                                                                                                                                                      NUMBER OF SEQ ID NOS: 22
SOFTWARE: PatentIn version 3.2
SEQ ID NO 17
LENGTH: 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17, Application US/10243130 Publication No. US20030143682A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                    Matches
                                                           Query Match
                                                                                                                                                                                                                                                      FILE REFERENCE: MOR-130
CURRENT APPLICATION NUMBER: US/10/243,130
CURRENT FILING DATE: 2002-09-13
PRIOR APPLICATION NUMBER: 09/707,468
PRIOR FILING DATE: 2000-11-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Grasso, Luigi
APPLICANT: Sass, Philip M.
TITLE OF INVENTION: ANTIBODIES AND METHODS FOR GENERATING GENETICALLY ALTERED
TITLE OF INVENTION: ANTIBODIES WITH HIGH AFFINITY
                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: ANTIBODIES AND METHODS FOR GENERATING GENETICALLY ALTERED TITLE OF INVENTION: ANTIBODIES WITH HIGH AFFINITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Nicolaides, Nicholas C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial FEATURE:
                  Local Similarity hes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                         100.0%;
                                      100.0%; Score 101; DB 14; 100.0%; Pred. No. 6.7e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 101; DB 16;
Pred. No. 1.6e-08;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 101; DB 14;
Pred. No. 6.4e-08;
                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 14;
                                                             DB 14;
                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 67;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                    Indels
                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                    Gaps
```

0

밁 Ś

. .

```
Thu Mar 24 13:01:22 2005
```

```
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         on:
                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                   Pending Patents AA, Main:*

1: /cgn2_6/ptodata/1/paa/US06_COMB.pep:*
2: /cgn2_6/ptodata/1/paa/US06_COMB.pep:*
4: /cgn2_6/ptodata/1/paa/US07_COMB.pep:*
5: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
5: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
6: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
7: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
9: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
10: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
11: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
12: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
13: /cgn2_6/ptodata/1/paa/US08_COMB.pep:*
14: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
15: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
16: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
17: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
18: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
19: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
20: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
21: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
22: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
23: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
24: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
25: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
26: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
27: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
28: /cgn2_6/ptodata/1/paa/US09_COMB.pep:*
29: /cgn2_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-018-245A-2
101
1 WINTYTGEPTYADDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6959266 seqs, 1168006243 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 March 24, 2005, 08:54:18; Search time 404.547 Seconds (without alignments) 49.082 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Result
No.
   Query
Match
   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
11005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
2 US-09-791-551-66
US-10-1018-245A-2
2 US-10-672-278-5
2 US-10-672-278-5
2 US-10-672-278-5
2 US-10-672-278-5
2 US-10-672-278-7
2 US-10-298-24303-9
4 US-10-243-130-19
5 US-09-191-837-14481
2 US-09-791-537-14481
2 US-09-791-537-14482
2 US-09-791-537-14481
2 US-09-791-537-14481
2 US-09-791-537-14481
2 US-09-791-537-143378
3 US-09-791-537-143378
4 US-09-791-537-143378
4 US-09-791-537-143378
4 US-09-791-537-143378
5 US-09-791-537-143378
6 US-10-383-447-10
9 US-10-383-447-20
PCT-USO2-13844A-23
PCT-USO2-13844A-24
PCT-USO2-13844A-25
PCT-USO2-13844A-26
PCT-USO2-38780-33
0 US-10-138-727A-25
0 US-10-138-727A-25
0 US-10-138-727A-25
0 US-10-138-727A-26
0 US-10-138-727A-26
0 US-10-138-727A-26
0 US-10-138-727A-26
0 US-10-138-727A-26
0 US-10-310-719-33
0 US-10-310-719-33
0 US-10-468-370-668
0 US-10-468-370-668
                                    Sequence 14, Appl
Sequence 29, Appl
Sequence 29, Appl
Sequence 29, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 17, Appl
Sequence 18, Appl
Sequence 18, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 14481, A
Sequence 127516, A
Sequence 13756, A
Sequence 13756, A
Sequence 13756, A
Sequence 13751, Sequence 1481, Appl
Sequence 10, Appl
Sequence 10, Appl
Sequence 11, Appl
Sequence 10, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 57, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 22, Appl
Sequence 23, Appl
Sequence 24, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 21, Appl
Sequence 21, Appl
Sequence 22, Appl
Sequence 23, Appl
Sequence 24, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 28, Appl
Sequence 30, Appl
Sequence 31, Appl
Sequence 33, Appl
Sequence 34, Appl
Sequence 33, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 86, Appl
Sequence 2, Appl
Sequence 5, Appl
```

SUMMARIES

Sequence Sequence

```
RESULT 1
US-09-791-551-86
                                          RESULT 2
US-10-018-245A-2
                                                                                    밁
                                                                                                       S
                                                                                                                                                                     ; ORGANISM: Mus
US-09-791-551-86
Sequence 2, Application US/10018245A
GENERAL INFORMATION:
APPLICANT: FUKUDA, Yoshiaki
APPLICANT: NAGAHIRA, Kazuhiro
                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: KLOSTZER, WILLIAM S.
APPLICANT: HANNA, NABIL
                                                                                                                                                                                                     SEQ ID NO 86
LENGTH: 17
                                                                                                                                        Query Match
Best Local
                                                                                                                              Matches
                                                                                                                                                                                                                     TITLE OF INVENTION: METHOD FOR PREPARING ANTI-MIF ANTIBODIES FILE REFERENCE: 037003/0277869

CURRENT APPLICATION NUMBER: 09/791,551

CURRENT FILING DATE: 2001-02-26

PRIOR APPLICATION NUMBER: 60/185,390

PRIOR EILING DATE: 2000-02-28

PRIOR PPLICATION NUMBER: 60/233,625

PRIOR APPLICATION NUMBER: 60/233,625

PRIOR APPLICATION NUMBER: 60/9-18

NUMBER OF SEQ ID NOS: 119

SOFTWARE: Patentin Ver: 2.1
                                                                                                                                                                                          LENGTH: 17
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                1 WINTYTGEPTYADDFKG 17
                                                                                                                                       Similarity
                                                                                    WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0
100.0
100.0
100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0
                                                                                                                             Conservative
                                                                                                                                                                               sp.
                                                                                                                                       100.0%;
                                                                                    17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-924-754-24

US-08-924-796-24

US-09-132-338-24

US-09-267-281-20

US-09-791-537-104209

US-10-138-727A-35

US-10-422-049-20
                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-292-866-23
US-08-456-418-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-292-866-24
US-08-456-418-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCT-US02-13844A-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-468-496-2021
US-10-468-496-2023
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-267-281-19
US-09-791-537-55585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-468-370-672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-468-370-668
                                                                                                                                     Score 101; DB 22; Pred. No. 9.3e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                             Mismatches
                                                                                                                                               DB 22;
                                                                                                                                               Length
                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 35, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 24, Appl
Sequence 20, Appl
Sequence 20, Appl
Sequence 104209,
Sequence 35, Appl
Sequence 20, Appl
Sequence 20, Appl
Sequence 23, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2035,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                             0
                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  e 672, App
e 2021, Ap
e 2023, Ap
e 2023, Ap
e 2027, Ap
e 2029, Ap
e 2031, Ap
e 2031, Ap
e 2033, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  670,
                                                                                                                             0
                                                                                                                              밁
                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                   RESULT 4
PCT-US98-24302-14
                                                                                                                                                                                                              US-10-672-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 3
US-10-672-278-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-018-245A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 5,
                                                                                                                                                                      Matches
                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                Local
                                                                                                                                                Н
```

```
TITLE OF INVENTION: CHIMENIC, HUMAN AND HUMANIZED ANTI-GRANULOCYTE
TITLE OF INVENTION: ANTIBODIES AND METHODS OF USE
FILE REFERENCE: 40923-0134US1
CURRENT APPLICATION NUMBER: US/10/672,278
CURRENT FILING DATE: 2003-09-29
FRIOR APPLICATION NUMBER: PCT/GB03/04229
FRIOR APPLICATION NUMBER: PCT/GB03/04229
FRIOR APPLICATION NUMBER: 60/414,341
FRIOR FILING DATE: 2003-09-30
FRIOR FILING DATE: 2003-09-30
INVMBER OF SEQ ID NOS: 51
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 5
LENGTH: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/018,245A
CURRENT FILING DATE: 2002-07-12
PRIOR APPLICATION NUMBER: JP 117394/2000
PRIOR FILING DATE: 2000-04-19
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 17
                                                                                                                               Sequence 14, Application PC/TUS9824302 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 17
TYPE: PRT
ORGANISM: mouse
APPLICANT: Purdue Pharma L.P.
TITLE OF INVENTION: IMMUNOGLOBULIN MOLECULES HAVING A SYNTHETIC VARIABLE TITLE OF INVENTION: REGION AND MODIFIED SPECIFICITY FILE REFERENCE: 6750-016-228
CURRENT APPLICATION NUMBER: PCT/US98/24302
CURRENT FILING DATE: 1998-11-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: GOLDENBERG, DAV. APPLICANT: HANSEN, HANS J APPLICANT: LEUNG, SHUI-ON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: NAKANISHI, Toshihiro TITLE OF INVENTION: Novel recombinant antibody, amino acid sequences of its complement TITLE OF INVENTION: determining regions and genes encoding the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 17
TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Chimeric amino OTHER INFORMATION: acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE: OTHER INFORMATION: CDR-H2 of anti-human TNF-alpha antibody
                                                                                                                                                                                                                                                                                                                                               l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                       WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                 WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10672278
                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DAVID M.
                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                        Score 101;
Pred. No. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 101; DB 26;
Pred. No. 9.3e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                        9.3e-09
                                                                                                                                                                                                                                                                                                                                                                                         DB 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Gaps
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                   0
```

110 1111 1121 1131 1141 1151 1161 1171 1171 1171 1171 1171 117	Result NO. 1 2 3 5 6	OM protein Run on: Title: Perfect sco Sequence: Scoring tab Searched: Total numbe: Maximum DB: Maximum DB: Post-proces: Database: Database:	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Score 101 101 101 101 101 101 101	E-0 - 0	
97.096.096.096.096.096.096.096.096.096.096		Copyright - protein search March 24, 2 US-10-018-2 1 UINITYTGEP 1 WINITYTGEP 1 WINITYTGEP 1 WINITYTGEP 283416 seqs r of hits satisf seq length: 0 seq len	'
120 1055 1055 1114 1114 1114 1117 1117 1117 1117 11	ength D 101 105 105 109 119 119	ght rch, , 200 , 200 gepT gepT isfy isfy isfy isfy isfy isfy isfy isfy	
B42848 C32530 C32530 C324766 A32530 D32967 C32967 S32187 S32189 S35759 B36259 S35730 B45722 B36259	!	3 - 200 sw mode sw mode 54:17; 17 17 0,5 0,5 0,5 sen par sen par sen par sen par sen par	Core version
mAb heavy chain prheavy chain vheavy chain v	Description Ig heavy chain V r	Search time 23.9062 Seconds (without alignments) 68.421 Million cell updates/sec dues dues ameters: 283416 es es redicted by chance to have a core of the result being printed, tal score distribution.	1
1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8898777773777 100077777777777777777777777777	90000000000000000000000000000000000000	30 31
444 200 4444 600000000000000000000000000	ቀቀ ሪያ የተቀቀቀ ነገር መመመ መመመ ከተመ ተመ ተመ ተመ ተመ መመመ መመመ መመመ መመመ	4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	73 73
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$\\ \tag{2}\\ \t	72.3 72.3
1971 2150 6486 6486 264 592 98. 110 1114 1114 1118 1135 135 136	114440 1200 14440 14440 14440 14440 14440	98 117 131 142 98 134 134 131 160 160 170 170 170 170 170 170 170 170 170 17	98 105
		2 A49051 2 S18554 2 S26792 2 S19245 2 S19245 2 S21924 2 S21924 2 PLO105 2 PH0671 2 PH0671 2 PH1668 2 S34114 2 B86168 2 S18260	
88400000000000000000000000000000000000			ig i
methionine S-mei RNA viral polyme hypothetical prit tyrocidine synth Ig heavy chain v probable exodeos glutamine-fructo Ig heavy chain v	amage are arbon cappotheti y heavy y heavy y heavy y heavy y heavy no clase heavy and chair of the control of t	Ig heavy ch	g heavy g heavy
ne Symethy ila poymera ical prote ne synthet chain V r chain prote ical prote chain pro	protein	Ig heavy chain V7 Ig heavy chain V7 Ig heavy chain V r Ig heavy chain V v Ig heavy chain V v Ig heavy chain V v Ig heavy chain V r	chain chain

ALIGNMENTS

RESULT 3 S24765 Ig heavy chain V region (subgroup XI) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Decies: Mus musculus (house mouse) C;Date: 20-Feb-1995 #sequence revision 21-Nov-1998 #text_change 23-Jul-1999 C;Accession: S24765; S24773; \$\overline{S}24778 A;Cross-references: GB:X03301; NID:g51757; PIDN:CAA27040.1; IA;NOTE: this sequence was determined from the differentiated C;Superfamily: immunoglobulin V region; immunoglobulin homolo C;Keywords: heterotetramer; immunoglobulin C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 23-Jul-1999 (;Accession: D24672 R;Winter, E; Radbruch, A.; Krawinkel, U. EMBO J. 4, 2861-2867, 1985 밁 C; Supertamil C; Keywords: R;Thomas, J.W.
submitted to the EMBL Data Library, August 1992
A;Reference number: S24776
A;Accession: S24777 A; Reference number: S24763 A; Accession: S24764 Ig heavy chain V region (subgroup XI) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 20-Feb-1995 #sequence_revision 21-Nov-1998 #text C;Accession: S24764; S24772; S24777 R;Klages, S. Ś S A; Introns: A; Cross-references: EMBL: Z15011 A;Molecule type: DNA A;Residues: 1-105 <KLW> A;Molecule type: DNA A;Residues: 1-105 <KLA> submitted to the EMBL 밁 A;Residues: 1-101 <WIN> A; Molecule type: DNA A; Accession: D24672 A; Reference number: A91022; MUID:86055722; Ig heavy chain V region (VGAM3-8) - m C;Species: Mus musculus (house mouse) Introns: 9/1
Superfamily: immunoglobulin V region; immunoglobulin homology Cross-references: EMBL:Z15020; NID:g52616; PIDN:CAA78739.1; PID:g52617; ;Molecule type: DNA ;Residues: 1-105 <THO> ;Cross-references: EMBL:Z14999 Matches Query Match Best Local Accession: Matches Best Query Match Local 62 31 l Similarity 17; Conserv heterotetramer; immunoglobulin 17; Similarity WINTYTGEPTYADDFKG 17 WINTYTGEPTYADDFKG 17 WINTYTGEPTYADDFKG Conservative Conservative Data 100.0%; 100.0%; Library, August 1992 78 0, 0 Score 101; DB 2; Pred. No. 1.1e-08; ; Mismatches 0; Score 101; DB 2 Pred. No. 1e-08; mouse (fragment) Mismatches 21-Nov-1998 #text_change 23-Jul-1999 immunoglobulin homology PMID:2998759 DB 2; 0 Length 105; Length 101; Indels Indels PID:g773215 gene 0 0, Gaps Gaps 0 0

> RESULT 5 S19967

A;Reference number: S19963 A;Accession: S19967 A;Status: preliminary

submitted to the EMBL Data Library, March 1992 A;Description: Structural characterization of CD4 mAb

W.; Riethmueller, G.; Weiss, E.M.; Rieber,

E. P.

09-Jul-2004

Ig heavy chain V region (M-T406) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 06-Feb-1995 #sequence_revision 06-Feb-1995 #text_change

R; Weissenhorn,

Accession: S19967

```
R;Klages, S. submitted to the EMBL Data Library, August 1992 A:Reference number: S24763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C; Superiamii
C; Keywords:
밁
                                                                                                                                                                                                                                                                         R;Stark, S.E.; Caton, A.J.

J. Exp. Med. 174, 613-624, 1991

A;Title: Antibodies that are specific for a single amino A;Reference number: S26309; MUID:91341421; PMID:1908510
                                                                                                                                                                                                                                                                                                                                              Ig heavy chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C;Accession: S26325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Thomas, J.W.
submitted to the EMBL Data Library,
A;Reference number: $24776
A;Accession: $24778
                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: EMBL:Z15022; NID:g52619; PIDN:CAA78741.1; PID:g52620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-105 <KLW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Accession: S24773
                                                                                                                                                     A;Cross-references: UNIPROT:Q921A6; EMBL:X59210; NID:g52080; PID:g1334043
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                         A; Molecule type: mRNA
A; Residues: 1-109 <STA>
                                                                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                                                                                                                                         A;Accession: S26325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Introns: 9/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type:
A;Residues: 1-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:Z15001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type:
                                                                                                                                      ;5-88/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Superfamily: immunoglobulin V region; immunoglobulin homology;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: EMBL:Z15013
                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Accession: S24765
                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rocar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 WINTYTGEPTYADDFKG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l Similarity
17; Conserv
                   1 WINTYTGEPTYADDFKG 17
                                                                    l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :ype: DNA
1-105 <THO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1-105 <KLA>
WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                               100.0%;
                                                                                  100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%;
56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 101; Ub 2,
                                                                                      Pred. No.
                                                                                                  Score 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  August 1992
                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                    1.1e-08;
                                                                                                      DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 105;
                                                                                                  Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                    Indels
                                                                                                                                                                                                                                                                                                 acid
                                                                                                                                                                                                                                                                                               interchange in
                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                               a protein
                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

...

2005

Q6PGF5
Q6ZQH0
RRPL HANTV
Q99AT5
Q89913
Q89913
Q9DYJ9
Q9E127
Q9QD48 MMT1_ARATH BMS1_HUMAN Q9LGJ3 Q45422 Q8A3Y7 Q15838 THED CO Q8K0N8 CORGL

Q8k0n8 Q9ltb2 Q9lt692 Q14692 Q6pgf5 Q6z456 P23456 P23456 Q99at5 Q89913 Q9dyj9 Q9dyj9

mus musculu
hantaan vir
hantaan vir
hantaan vir
hantaan vir

Q8G2G8 Y96X RHILO Q82FY6

045422 Q8a3y7 Q15838

leishmania

streptomyce oryza sativ caenorhabdi bacteroides

brucella su rhizobium l

Q8nqh1 Q6bir4

1 c multifunc
4 debaryomyce
8 mus musculu
2 arabidopsis
2 homo sapien
5 mus musculu

Q8KZU4 Q8L0C2 Q8CC32 Q66C32 Q8ZFV8 Q8YFF1

Q6ffg3 Q8kzu4 Q810c2 Q66c32 Q6szfv8 Q8zfv8 Q8yff1 Q8g2g8 Q8g2g8 Q98p28 Q98p28 Q91gj3

myxine glut haemophilus acinetobact uncultured uncultured yersinia ps yersinia pe brucella me

Q71TD1
Q6D859
Q6Q6D1
Q836K9
HV1C HUMAN
Q9A2T1
Q9A2T1
Q9SWG7
HIS6 HAEIN
Q6FFG3

Q6q6d1 Q836k9 P01744

enterococcu homo sapien caulobacter

Q9XHY4 048377

048377

d oryza sativ 7 bacteriopha L bacteriopha erwinia car

CRB3 SCHPO Q98T82 MIG1 KLULA Q8WY24 MIG1 KLUMA Q8JVD0

Q98t82 P50898

2 gallus gall 3 kluyveromyc 1 homo sapien

schizosacch ralstonia brachydanio brachydanio ralstonia bordetella

kluyveromyc foot-and-mo

Q8wy24

Q7WLH3 Q68A45 EG2B_BRARE Q66HY5

Q9arra
Q810j3
Q8VQ9j1
Q7Ytw2
Q7Yvx60
Q7vx60
Q7v826
Q7v826
Q7w81h3
Q68459
Q685159
Q685159

bordetella bordetella

Q8XR46

Q72AR7 Q81HL9 Q830L3 Q9ARR2 Q9ARR2 Q8L0J3 Q8VQ91 Q7YTW2 Q8YX4 Q8YX4 Q8YX4 Q7YX60 Q7W826

uncultured uncultured caenorhabdi

bacteroides

Q7XJ49 HV15 MOUSE Q45776

Q45776 Q72ar7 Q8ihl9 Q83013

drosophila enterococcu oryza sativ

P95552
Q65WZ7
Q65WZ7
Q6LZI9
Q9EYQ4
Q9EA3F1
Q8A3F1
Q8A3F9
Q8A3FS

Q8a2m9 Q10289

bacteroides bacteroides clostridium oryza sativ

Q7xj49 P01759

giardia lam allium cepa mus musculu

bacteroides

desulfovibr

P95552 Q65fv7 Q65wz7 Q61zi9 Q61zi9 Q9eyq4 Q8a3f1

bacillus

45

CANAL

anabaena sp bifidobacte

azoarcus sp candida alb pyrobaculum arabidopsis

yersinia pe chlamydomon

homo sapien chlamydomon ashbya goss chlamydomon

Q6PPG2 Q7Z7P5

ALIGNMENTS

```
Lung J.H., Choi S.J., Kim H.J., Kim I.J., Choi I.H., Lee S.D., Yi K.S., Suh P.G., Ryu S.H., Chung H.K.;

"Cloning and characterization of cDNAs encoding VH and VL of a monoclonal anti-CEA antibody (CEA 79) cross-reactive with NCA-95 and generation of a single-chain Fv molecule (scFv).";

RT Mol. Cells 7:816-819(1997).

DR EMBL; U88067; ABAB8044.1; -.

DR PIR; S19968; S19965.

PIR; S19968; S19967.

PIR; S26325; S26325.

SMART; SMO^^
PSO^*
    PT NO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOUTH THE PRICE OF THE PRICE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q921A6;
Q921A6;
Q1-DEC-2001
Q1-DEC-2001
Q1-MAR-2004
InterPro; IPR007110; Ig-like.
InterPro; IPR003596; Ig_v.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LIKE; 1.
NON_TER 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-2001 (TrEMBLrel. 19,
01-DEC-2001 (TrEMBLrel. 19,
01-MAR-2004 (TrEMBLrel. 26,
Anti-CEA 79 single chain FV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Anti-myosin immunoglobulin heavy chain variable region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q9JL79;
01-OCT-2000
                                                                                                                                         Infect. Immun. 68:5803-5808(2000)
EMBL; AF206027; AAF69325.1; -.
                                                                                                                                                                                                                                                                                                                      STRAIN=A.CA;
                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9JL79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS50835; IG_LIKE;
NON_TER 1 1
NON_TER 241 241
                                                                                                                  HSSP; P01751; 1NQB.
                                                                                                                                                                                                        DOI=10.1128/IAI.68.10.5803-5808.2000;
Malkiel S., Liao L., Cunningham M.W., Diamond B.;
"T-Cell-dependent antibody response to the dominant
streptococcal polysaccharide, N-acetyl-glucosamine,
                                                                                                                                                                                                                                                                                                 MEDLINE=20448942; PubMed=10992488;
                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N
                                                                                                                                                                                                                                                                                                                                                                                                                                                           musculus (Mouse)
                                                                                                                                                                                   cardiac myosin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       l Similarity
17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
241 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 15, 0) (TrEMBLrel. 15, 1) (TrEMBLrel. 25, 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                               Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26086 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 101; DB 2;
Pred. No. 2.1e-08;
                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0276887248E9C771 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     102 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                             epitope of is cross-reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241;
                                                                                                                                                                                                                                  o
f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
RESULT
Q683Y7
                                                                                                                                                     RESULT
Q683Y8
                                                                                                                                                                                                                                                                 SQUE TENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
 RRAPPOCCOST
                                                                                                                                                                                           밁
                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q683Y7;
Q683Y7;
25-OCT-2004
25-OCT-2004
25-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON TER
                                                                                                         25-OCT-2004
25-OCT-2004
25-OCT-2004
                                                                                                                                   Q683Y8;
                                                                                                                                                                                                                                                                                         Pfam; PF00047; ig; 1.
SMART; SM00409; IG; 1.
SMART; SM00406; IGv; 1.
PROSITE; PS50835; IG_LI
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse)
                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                        Submitted (JUL-2004) to the EMBL/GenBank/DDBJ EMBL; AJ784033; CAH04483.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                     Phalipon
                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=Balb/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Name=IGHV
        Phalipon A., Costachel C., Thuizat A., Nato "Anti-lipopolysaccharide antibodies protecti
                        SEQUENCE FROM N.A.
STRAIN=Balb/c;
                                                   NCBI_TaxID=10090;
                                                                                        Immungolobulin heavy
Name=IGHV;
                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                          NON_TER
                                                                                                                                                                                                                                                                                   NON TER
                                                                                                                                                                                                                                                                                                                              InterPro; IPR003599;
InterPro; IPR007110;
InterPro; IPR003596;
                                                                                                                                                                                                                                                                                                                                                                           determinant on the O-antigen.
                                                                                                                                                                                                                                                                                                                                                                                      flenxeri
                                                                                                                                                                                                                                                                                                                                                                                             Phalipon A., Costachel C., Thuizat I
"Anti-lipopolysaccharide antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immungolobulin heavy
 flenxeri
                                                                                                                                                              4
                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  w
                                                                                                                                                                                           50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             35
                                                                                                                                                                                                            -
                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16; Conservative
                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                          WINTYTGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                                                        FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WINTETGEPTYADDFKG
                                                                                                                                                                                                                                                                                                                                                                                    2a infection recognize an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    102 AA;
                                                                                                         (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                 116 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102
 infection
                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                      Costachel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chordata;
Rodentia;
                                                              Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 28, L/
1. 28, L/
31. 28, T/
y chain .
                                                                                                                                                                                                                                                                 12863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11543 MW;
                                                                                                                                                                                                                                                                                                                                       Ig.
Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         91.1%;
94.1%;
                                                                                                                                                                                                                                     86.1%;
                                                                                                                                                                                                                                                                                            LIKE;
                                                                                                                                                                                                                                                                                                                              Ig_v.
                                                                                                 chain
                                                                                                                                                                                                                                                                                                                                                                                                     с.
;
                                                                                                        28, Created)
28, Last sequence update)
28, Last annotation updat
                                                                                                                                                                                                                                                                 ₩;
                                                                                                   variable
                                                                                                                                                                                           99
                                                                                                                                                                                                           17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     variable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last
Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                            Created)
                                                                                                                                                                                                                                     Pred.
                                                                                                                                                                                                                                       Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 2.60); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                              Craniata; Vertebrata; I
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                 5EC11AD02E911952 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E590C292093F6711 CRC64;
 an
                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence update)
                                                                                                                                                                                                                                                                                                                                                                                    t A., Nato F.;
es protective aga
n immunodominant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92;
 protective against
immunodominant serot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                notation update)
region (Fragment).
                                                                                                 region
                                                                                                                                              116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116
                                                                                                                                                                                                                                       2e-06;
                                                                                                                                                                                                                                                BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .6e-07
                                                                                                                                              B
                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                 n update)
(Fragment).
                                                                                                                                                                                                                                                                                                                                                                                             against Shigella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 102
                                                                                                                                                                                                                                               Length 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                     serotype-specific
serotype-specific
                                                               Euteleostomi; Murinae; Mus
          Shigella
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus
                                                                Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                               0
```

Thu

Mar

24 13:01:22

2005

Aab94482 Abg66709 Abg66686 Aar08346

Adi28041 Aab36393 Abr63160

Ads18702 Ads18708 Aar27040 Aaw53584

32687 32695 32693 32683

Ads18692 Ads18666

```
Minimum
Maximum
                                                                                                                                                                                                                                                                               Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9:
 222211111111 987654
                                                                                                                                                                                                                                                                                                                                  Pred. N
score g
and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB DB
                                                                                                                                                                                                                                                                                Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length:
seq length:
                                                                                                                                                                                                                                                                                                                                           No. is t
 derived
                                                                                                                                                                                                                                                                                                                                                                         A Geneseq_16Dec04:*
1: geneseqp1990s:*
2: geneseqp1990s:*
3: geneseqp2001s:*
4: geneseqp2001s:*
5: geneseqp2003as:*
6: geneseqp2003bs:*
7: geneseqp2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-018-245A-3
51
1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                 is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                               Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 ,
 2105692 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24,
                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000000000
2005, 08:54:17; Search time 60.75 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version
(c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext
                                                                                                                                                                                                                                                                                BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386760381 residues
          AAE04200
ABG64202
ADL77769
AAB36391
ABP69129
AAE04244
AAE04244
AAE04244
AAE04244
AAE04234
AAB93215
AAB93215
AAB93215
AAB93215
AAB88373
AAB93212
                                                                                                                                                           AAG80313
AAG80317
ABU02662
ADK47752
ADR94312
AAW05825
AAW36167
AAW36167
AAW36167
                                                                                                                                                                                                                                                                                ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ¥8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.5
                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2105692
          Abg6420
Abg6420
Adl77769
Adl77769
Aab36391
Abp69127
Aab36394
Aae04244
Aae04244
Aae09860
Aab36392
Aab93215
Aab93215
Aab93215
Aab93213
Aab93213
                                                                                                                                                           Aag80313
Aag80317
Abu02662
Adk47752
Adr94312
Aaw05825
Aaw36167
Aaw36165
Aaw070516
                                                                                                                                                                                                                                                                               Description
Anti-huma S. pneumo Streptoco Novel S. Humanised Heavy Cha Humanised Humanised Humanised Humanised Human ali human gen Human pol Mouse tum Human pol Novel human pro Human pro
                                                                                                                                                                                                                                                         Anti-huma
   40
40
40
  \begin{array}{c} 140 \\ 242 \\ 242 \\ 244 \\ 244 \\ 244 \\ 244 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\ 444 \\
 ADI128041

ANB136393

ARR63160

ARR666686

ADR18666686

ADR18666686

ADR18666686

ADR18666686

ADR18702

ADR318702

ADR318702

ADR327040

ARR27040

ARR27040

ARR27040

ARR27040

ARR27813

ARR27813

ARR27811

ARR2811

ARR2811
```

Aamio1569 Abg356025 Adr66025 Adr66025 Adr66023 Aay24418 Abb77791 Adb77791 Adb77791 Add820951 Add82127 Aay5025 Aay5

Human col Novel hum Functiona

Abb18253 Aam65958 Aam53577 Aam26232 Abb27600 Aar13721 Aam13825 Abb32770 Abp72635 Aaw48650

Abg47622

Abg32691 Aae27809

Aae27823

Abg3 Abg3 Abg3 Abg3 Abg3 Abg3 Abg3 Abg3

Aae27811 Aae27813 Aae27815 Aae27821

Aar27049 Aar27051 Aae27817 Aae27819

Aar79868 Aar79867

Mouse 425
Mouse 426
Mouse 427
Mouse 426
Mouse 427
Mouse 427
Mouse 427
Mouse 427
Mouse 428
Mouse 427
Mouse 428
Mouse 427
Mouse 428
Mouse 427
Mouse 428
Mouse 428
Mouse 429
Mouse 427
Mouse 428
Mouse 429
Mouse 429
Mouse 427
Mouse 428
Mouse 429
Mouse

Aar79871 Aar79872 Aar79870

Aar79869 Aar79873

```
RESULT 2
AAG80317
ID AAG8
XX
AC AAG8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1
AAG80313
                                                                                                                             S
                                                                                                                                                                                                                        밁
                                                                                                                                                             Query Match
Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                 or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neutoprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factorialpha (TNF-alpha) heavy chain CDR1 designated CDR-H3
   AAG80317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAG80313;
                              AAG80317 standard; protein; 117 AA
                                                                                                                                                                                                                       Sequence 8 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAG80313 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fukuda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        38
8
                                                                                                                                                              Similarity
8; Conserv
                                                                                                                                 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                             Page 26; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TNF-alpha
                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74.5
74.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                           100.0%; S
100.0%; P
ative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDR-H3 peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nakanishi T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY77993
AAR25728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      œ
                                                                                                                                                             Score 51; DB 5; 1
Pred. No. 1.8e+06;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ALIGNMENTS
                                                                                                                                                                                          Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aay77993 Amino aci
Aar25728 Humanised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           toxic shock
                                                                                                                                                              0
                                                                                                                                                           Gaps
                                                                                                                                                              0
RESULT 3
ABUCZES
ID ABBCZ
XX ABUCZ
XX ABUCZ
XY 11-7
XX ABUCZ
DT 11-7
XX XX ABUCZ
XX Bact
XX Gena
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                           Ş
                                         Bacterial meningitis; pneumonia; antiinflammatory; antibacterial;
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 117 AA;
                             gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                    23-OCT-2003
11-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          syndrome.
                                                                                                                                                                                                                                                                     99
   pneumoniae;
                                vaccine.
```

```
Query Match
Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                  This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences: The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factoralpha (TNF-alpha) heavy chain CDR fragment described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel heavy and light-chain polypeptides of chimeric and antibodies against human tumor necrosis factor alpha for immunogenicity treatment of TNF-related diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-066345/09.
N-PSDB; AAI69375.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-FEB-2002 (first entry)
S. pneumoniae type 4 strain protein from coding region #2241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 27-28; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-human TNF-alpha H chain CDR region.
                                                                                                                         ABU02662 standard; protein; 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SUNR ) SUNTORY LTD
                                                                                                                                                                                                               YDYDGFDY 106
                                                                                                                                                                                                                                                YDYDGFDY 8
                                                                                                                                                                                                                                                                                   Conservative
                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nakanishi T;
                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                   Score 51; DB 5;
Pred. No. 0.8;
; Mismatches (
                                                                                                                          A
                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                    Length 117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             humanized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              toxic shock
                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                     Gaps
```

type 4

strain

sepsis; otitis media; ear infection; immunostimulant; auditory; respirato

auditory; respiratory;

```
Thu Mar 24 13:01:23
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on:
     22222221111111
2222222111111111
265432109876543210
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. Ne score sand is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB seq
                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                            s greater t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
    of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Issued
1: /cgn
2: /cgn
3: /cgn
4: /cgn
5: /cgn
6: /cgn
                                                                                                                                                                                                                                                                                                                                                                                          Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-018-245A-3
51
1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 100
     Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             wed_Patents_AA:*
/cgm2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgm2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgm2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgm2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgm2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgm2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000000000
    2005, 08:57:11 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapext
           |S-09-583-110-4267
|S-09-107-433-2947
|S-08-397-411-11
|S-08-397-411-11
|S-08-656-586-8
|S-08-656-586-8
|S-08-397-411-13
|S-07-946-421-24
|US-07-946-421-28
|US-07-946-421-28
|US-08-553-497A-28
|US-08-553-497A-26
|US-08-553-497A-26
|US-08-553-497A-27
|US-08-553-497A-27
|US-08-553-497A-27
|US-08-553-497A-27
|US-08-553-497A-27
|US-09-821-687-2
|US-08-533-497A-27
|US-09-821-687-3
|US-07-634-278-61
|US-08-477-728-61
|US-08-477-728-61
    summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ws
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search time 16.125 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                         Description
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                       sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
                                                                                                                                                                                                                                                                                                                                               Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                  Sequence
4267 Ap
2947, Ap
10 Appl
11, Appl
4, Appl
8, Appl
7, Appl
7, Appl
7, Appl
7, Appl
24, Appl
26, Appl
26, Appl
27, Appl
27, Appl
28, Appl
29, Appl
20, Appl
20, Appl
21, Appl
22, Appl
23, Appl
24, Appl
27, Appl
28, Appl
29, Appl
20, Appl
21, Appl
21, Appl
21, Appl
22, Appl
23, Appl
24, Appl
25, Appl
26, Appl
27, Appl
28, Appl
29, Appl
20, Appl
20, Appl
21, Appl
22, Appl
23, Appl
24, Appl
25, Appl
26, Appl
26, Appl
27, Appl
28, Appl
28, Appl
28, Appl
29, Appl
20, Appl
20
  34
34
                                                                                                                                                                                                                                                                                                                                                                           114
260
289
341
350
350
350
350
350
361
361
361
1060
119
 US-08-474-040-60
US-08-487-200-61
US-08-487-200-61
US-08-487-200-61
US-08-487-200-61
US-08-487-200-61
US-08-487-200-61
US-08-487-200-33
US-08-484-537-61
US-08-484-537-61
US-08-484-537-61
US-08-484-537-61
US-08-484-537-33
US-08-477-728-3
US-08-477-728-3
US-08-484-537-33
US-08-484-537-33
US-08-484-537-33
US-08-484-537-33
US-08-484-537-33
US-09-270-767-46040
US-09-284-796A-1529
US-09-284-796A-21570
US-08-481-996A-21570
US-08-481-996A-2115
US-09-513-996-4135
US-09-513-996-4134
US-08-117-954-1141
US-08-117-954-1145
US-08-117-954-1145
US-08-117-954-1145
US-08-117-954-1150
US-08-117-954-1145
US-08-117-954-1145
US-08-117-954-1150
US-08-117-954-1150
US-08-117-954-1150
US-08-117-954-1150
US-08-117-954-1150
US-08-117-954-1150
 sequence
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
Sequence
60, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
37, Appl
38, Appl
33, Appl
37, Appl
38, Appl
37, Appl
38, Appl
38, Appl
39, Appl
30, Appl
30, Appl
30, Appl
30, Appl
30, Appl
30,
```

```
US-09-107-433-2947
; Sequence 2947, Application US/09107433
; Patent No. 6800744
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-583-110-4267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-583-110-4267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4267, Applic Patent No. 6699703
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
SEQ ID NO 4267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/085,131
PRIOR FILING DATE: 1998-05-12
PRIOR APPLICATION NUMBER: US 60/051,553
PRIOR FILING DATE: 1997-07-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/583,110
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/107,433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lynn Doucette-Stamm et al.
TITLE OF INVENTION: Nucleic Acid and Amino Acid Sequences Relating to Streptococcus
TITLE OF INVENTION: Pneumoniae for Diagnostics and Therapeutics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                           ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
                                                                                                                                                                       APPLICATION NUMBER: US/09/107,433
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
TELECOMMUNICATION
                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 DYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DYDGFDY 105
                                                                                                                                                                                                                                                         COMPUTER: <Unknown>
OPERATING SYSTEM: <Unknown>
SOFTWARE: <Unknown>
                                                                                            APPLICATION NUMBER: 60/ 085131
FILING DATE: May 12, 1998
APPLICATION NUMBER: 60/051553
FILING DATE: July 2, 1997
                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Waltham
                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 100 Beaver Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: GENOME THERAPEUTICS CORPORATION
                REFERENCE/DOCKET NUMBER: GTC-011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09583110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PATH00-07A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1998-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-05-26
BER: US 09/107,433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FOR DIAGNO
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
LOCATION: (B) LOCATION 1...120
SEQUENCE DESCRIPTION: SEQ ID NO: 2947:
US-09-107-433-2947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-397-411-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 10, Application US/08397411 Patent No. 6129914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                             SOPTWARE: Patentin Release #1.0, Ve CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/397,411
FILING DATE: 01-MAR-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION DATA:
107-MAR-1992
APPLICATION UNMBER: US 07/859,583
FILING DATE: 27-MAR-1992
ATTORNEY/AGENT INFORMATION:
NAME: Smith, William M.
REGISTRATION NUMBER: 30,223
REFERENCE/DOCKET NUMBER: 011823-004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                      TELEFAX: 415-326-2422
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 2947: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Bispecific Antibody Effective to Treat TITLE OF INVENTION: B-Cell Lymphoma and Cell Line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Tso,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                   TOPOLOGY:
                                  STRANDEDNESS:
                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111 DYDGFDY 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 DYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity 7; Conserv
                                                   amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 120 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (781)893-5007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SE: Townsend and Townsend and Crew
One Market Plaza, Steuart Tower, Suite 2000
                                                                       120 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Link, Brian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gingrich, Roger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Weiner,
                 linear
                                  single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (781)893-8277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            George
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                           10:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                    011823-004901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 4;
Pred. No. 2.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
```

0,

Thu

Mar

24 13:01:23

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                    Pred. No.
score grea
and is der
                                                                                                                                      Score
                                                                                                                                                                                    d. No. is the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq
                                                                                                                                                                                                                     Published Applications AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

12: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/US10B_NEW_PUB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

15: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/2/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/2/pubpaa/US10B_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                     %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-018-245A-3
51
1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      March 24, 2005, 08:56:15; Search time 46.125 Seconds (without alignments) 57.427 Million cell updates/sec
           100.0
86.3
84.3
84.3
84.3
84.3
84.3
84.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1407402 seqs, 331100923 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                      Length
   108
108
120
120
120
279
359
363
3446
4466
4466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapext
                                                                                                                                      멂
    16
15
15
15
15
15
17
17
17
17
17
17
 US-10-018-245A-3

US-10-472-928-4482

US-10-435-299-11

US-10-435-299-11

US-10-435-299-13

US-09-833-245-1251

US-10-82-300-136

US-10-822-300-138

US-10-822-300-139

US-10-822-300-139

US-10-822-300-139

US-10-822-300-139

US-10-822-300-139

US-10-822-300-139

US-10-822-300-140

US-10-822-300-140
                                                                                                                                      H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ltd
                                                                                                                                      Description
Sequence 3, Appli
Sequence 4482, App
Sequence 10, Appl
Sequence 11, Appl
Sequence 13, Appl
Sequence 1251, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 136, App
Sequence 137, App
Sequence 139, App
Sequence 140, App
Sequence 140, App
Sequence 140, App
   5 US-10-257-174-25
S US-10-257-174-25
S US-10-257-174-25
S US-10-257-174-26
S US-10-468-370-648
S US-10-468-370-648
S US-10-468-370-650
S US-10-468-370-650
S US-10-468-370-650
S US-10-468-370-650
S US-10-468-370-650
S US-10-468-370-652
S US-10-468-370-654
S US-10-468-328-1
S US-10-468-528-1
S US-10-48-528-1
S US-10-48-528-1
S US-10-48-528-1
S US-10-437-963-111527
S US-10-48-52-357-3
S US-10-48-65-1
S US-10-48-79-357-4
S US-10-48-79-357-4
S US-10-48-79-357-4
S US-10-29-29-200A-2
S US-10-29-200A-2
S US-10-29-200A-2
S US-10-29-200A-2
S US-10-29-200A-2
S US-10-29-29-200A-2
S US-10-38-1-29-29-200A-2
S US-10-29-29-200A-2
S US-10-437-963-11389
S US-10-437-963-11389
S US-10-437-963-11389
S US-10-437-963-11389
S US-10-437-963-1189083
S US-10-369-493-1158
 Sequence 25, Appl Sequence 26, Appl Sequence 26, Appl Sequence 644, App Sequence 644, App Sequence 646, App Sequence 648, App Sequence 650, App Sequence 650, App Sequence 654, App Sequence 654, App Sequence 654, App Sequence 1, Appli Sequence 20, Appli Sequence 37, Appli Sequence 37, Appli Sequence 66, Appli Sequence 61, Appli Sequence 11527, App Sequence 61, Appli Sequence 61, Appli Sequence 61, Appli Sequence 61, Appli Sequence 2102, Appli Sequence 21, Appli Sequence 21, Appli Sequence 21, Appli Sequence 22, Appli Sequence 23, Appli Sequence 23, Appli Sequence 24, Appli Sequence 28, Appli Sequence 44, Appli Sequence 44, Appli Sequence 44, Appli Sequence 28, Appli Seq
```

```
APPLICANT: CHIRON SPA
APPLICANT: THE INSTITUTE FOR GENOMIC RESEARCH
ITTLE OF INVENTION: STREPTOCOCCUS PNEUMONIAE PRO
FILE REFERENCE: P026926WO
CURRENT APPLICATION NUMBER: US/10/472,928
CURRENT FILING DATE: 2003-09-26
PRIOR APPLICATION NUMBER: GB-0107658.7
PRIOR FILING DATE: 2001-03-27
NUMBER OF SEQ ID NOS: 4979
SOFTWARE: SegWin99, version 1.03
                                                                                                                                                                                                                                                                                       RESULT 2
US-10-472-928-4482
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: CDR-H3 of anti-human TNF-alpha antibody
US-10-018-245A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-018-245A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/10018245A Publication No. US20040115196A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                    Sequence 4482, Application US/10472928 Publication No. US20050020813A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: JP 117394/2000
PRIOR FILING DATE: 2000-04-19
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 8
TYPE: PRT
                               SEQ ID NO 4482
LENGTH: 108
                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/018,245A
CURRENT FILING DATE: 2002-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: FUKUDA, Yoshiaki
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAKANISHI, Toshihiro
APPLICANT: NAKANISHI, Toshihiro
TITLE OF INVENTION: Novel recombinant antibody, amino acid sequences of its complemer
TITLE OF INVENTION: determining regions and genes encoding the same
FILE REFERENCE: 46224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: mouse
                 TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
ORGANISM: Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                         1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
8; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70.6
70.6
70.6
70.6
70.6
                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-282-122A-70602

US-10-282-125A-71683

US-10-857-625-660

US-10-425-114-58931

US-10-425-114-62721

US-10-425-114-62720

US-10-425-114-63215

US-10-425-114-3215

US-10-425-114-3215
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-815-242-5283
US-09-815-242-12600
US-09-815-242-12732
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 51; DB 16;
Pred. No. 1.3e+06;
); Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-282-122A-43793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-663-244-97
                                                                                                                                                                                     PROTEINS AND NUCLEIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 8;
                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 5283, A
Sequence 12600,
Sequence 12732,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 43793, A
Sequence 70602, A
Sequence 71683, A
Sequence 660, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660, App
58931, A
62721, A
56520, A
63215, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Appl
Appl
Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A A A
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: TGO, J. YUN
APPLICANT: TGO, J. YUN
TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
FILE REFERENCE: 05802-0176-CNUS04
CURRENT APPLICATION UNMBER: US/10/435,299
CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: US 09/618,380
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: US 08/397,411
PRIOR APPLICATION NUMBER: US 08/397,411
PRIOR APPLICATION NUMBER: US 07/859,583
PRIOR FILING DATE: 1995-03-01
PRIOR FILING DATE: 1995-03-27
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PATENTIN VERSION 3.1
SEQ ID NO 10
LENGTH: 120
                           APPLICANT: Weiner, George
APPLICANT: Gingrich, Roger
APPLICANT: Link, Brian
APPLICANT: Link, Brian
APPLICANT: Tso, J. Yun
APPLICANT: Tso, J. Yun
TITLE OF INVENTION: HUMANIZED ANTIBODIES AGAINST CD3
FILE REFERENCE: 05882-0176-CNUS04
CURRENT APPLICATION NUMBER: US(10/435,299)
CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: US 09/618,380
PRIOR APPLICATION NUMBER: US 09/618,380
PRIOR APPLICATION NUMBER: US 08/397,411
PRIOR FILING DATE: 1995-03-01
PRIOR APPLICATION NUMBER: US 07/859,583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                       RESULT 4
US-10-435-299-11
                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; FEATURE:
; OTHER INFORMATION: Heavy chain of Humanized M291 Ab minus signal sequence
US-10-435-299-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-435-299-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-472-928-4482
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 10, Application US/10435299
Publication No. US20040052783A1
                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     Sequence 11, Application US/10435299 Publication No. US20040052783A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Link, Brian APPLICANT: Tso, J. Yun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Weiner, George APPLICANT: Gingrich, Rog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: hypothetical protein
OTHER INFORMATION: Cellular location: cytoplasm
OTHER INFORMATION: Similar to strain R6 sequence 15903989 (8.E-63)
                 PRIOR FILING DATE: 1992-03-27
                                                                                                                                                                                                                                                                                                                                                                         102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 DYDGFDY 8
SEQ ID NOS: 14
                                                                                                                                                                                                                                                                                                                                                                         YDYDGFAY 109
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         84.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 43;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 17;
8.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CD3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
```

Thu

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein - protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      on:
    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB DB
                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                       %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-018-245A-3
51
1 YDYDGFDY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             March 24, 2005, 08:54:17; Search time 11.25 Seconds (without alignments) 68.421 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                         PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             283416 seqs, 96216763 residues
   Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Copyright
                                                                                                                                                                                                                                                                                                                                       Length
  GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapext
                                  F168896
F168896
F17586
F330560
F330560
F330560
F330560
F33084
F38060
F39000
F39
                                                                                                                                                                                                                                                                     C95250
A99715
T28269
S60067
B71440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            model
acetyl-CoA synthet hypothetical prote probable berberine phosphoglycerate m hypothetical prote endo-1,4-beta-xyla glutamine-rich prohypothetical prote hypothetical prote hypothetical prote
                                                                                                hypothetical prote nonclassical class penicillin-binding ribonuclease T1 (E II heavy chain V r II heavy chain V r II heavy chain V r probable endo alph acetyl-CoA carboxy H+-transporting AT coagulation factor hypothetical prote hypothetical prote hypothetical prote hypothetical prote heterogeneous nucl conserved hypothet MHC Class I - mous MHC Class I - mous
                                                                                                                                                                                                                                                                              hypothetical prote hypothetical prote ORF MSV108 hypothe Igheavy chain V r
                                                                                                                                                                                                                                                                                                                                         Description
                         146858

145876

1157814

1157814

1157814

1157814

1157816

1157816

1157816

1157816

1157816

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150176

1150177

1150176

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

1150177

11501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            158989
526325
827472
827473
837891
926404
910059
8464962
864967
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
9747379
```

heterogeneous nucl
MHC class I lympho
hypothetical prote
class I histocompa

tRNA (guanine-N1)MHC class I HLA-J
class I-related se
MHC H-2KI-k - mous
MHC HLA-A cell sur
MHC class I histoc
chlorophyll a/b-bi
class I histocompa
MHC ChAs I histocompa
MHC Class I histocompa
CHAS I histocompa
MHC class I histocompa

MHC H2-K transplan MHC class I H2-K-b Ig heavy chain V r Ig heavy chain prote alternative splici alternative splici alternative splici alternative splici alternative splici alternative splici protein conserved hypothetical prote alternative splici conserved hypothetical prote alternative splici conserved hypothetical prote hypothetical protein class I histoc MHC class I histocompa class I hist

ALIGNMENTS

C;Species: Streptoco C;Date: 22-Oct-2001: C;Accession: A99715 R;Hoskins, J.A.; Albo C;Date: 21-Jan-2000 #sequence_revision C;Accession: T28269 R;Afonso, C.L.; Tulman, E.R.; Lu, Z.; CJ. Virol. 73, 533-552, 1999 A;Title: The genome of Melanoplus sangu C;Accession: C95250 C;Accession: C95250 C;Accession: C95250 C;Accession: C95250 On, J.D.; Whayam, L.A.; White, O.; Salzberg, nson, T.; Hickey, E.K.; Holt, I.E. Science 293, 498-506, 2001 hypothetical protein SP2139 [imported] - Streptococcus pneumoniae (strain TIGR4) (Species: Streptococcus pneumoniae (C;Species: Streptococcus pneumoniae (C;Spate: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 09-Jul-2004 (C;Accession: C95250 J. Bacteriol. 183, 5709-5717, 2001 A; Tuthors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; A;Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6. A;Reference number: A97872; MUID:21429245; PMID:11544234 A;Accession: A99715 A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, A;Title: Complete Genome Sequence of a virulent isolate of Streptococcus A;Reference number: A95000; MUID:21357209; PMID:11463916 A;Accession: C95250 R;Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, Jy, P.; Sun, P.M.; Winkler, M.E. ORF MSV108 hypothetical protein - Melanoplus sanguinipes entomopoxvirus C; Species: Melanoplus sanguinipes entomopoxvirus á 밁 გ A; Cross-references: UNIPROT: Q97NB3; A; Experimental source: strain TIGR4 A; Molecule type: DNA A; Residues: 1-108 < KI 밁 A;Gene: spr1948 A;Residues: A; Status: preliminary hypothetical protein spr1948 [imported] -A;Status: preliminary Molecule type: DNA Species: Streptococcus pneumoniae ;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 09-Jul-2004 Query Match Best Local Genetics: Matches Cross-references: Local Similarity SP2139 99 99 1-108 <KUR> 1-108 <KUR> Similarity 7; Conserv DYDGFDY 105 DYDGFDY 105 DYDGFDY DYDGFDY Conservative Conservative UNIPROT: Q8CY66; æ 86.3%; 100.0%; 86.3%; Score 44; 100.0%; Pred. No. tive 0; Mismatc Score 44; DB 2; Pred. No. 1.3; 0, sanguinipes GB:AE007317; PIDN:AAL00750.1; GB:AE005672; PIDN:AAK76196.1; Mismatches Mismatches Oma, I.T.; Bisen, J.A.; zberg, S.L.; Lewis, 21-Jan-2000 #text_change 09-Jul-2004 Streptococcus (F) B Kutish, G.F.; 2 2 0, J.A.; Read, T.D.; Peterson, S.; Hei Lewis, M.R.; Radune, D.; Holtzapple, <u>,,</u> Length 108 Length 108 k, L.; Burgett, S.; DeHoff, B J.; Matsushima, P.; McAhren, Indels Indels pneumoniae <u>.</u> 0 PID:g15459647; PID:g14973651; GSPDB (strain Gaps Gaps B.A.; Morrison pneumoniae. Jaskunas, 0 0 œ GSPDB S.R ຮ : : :

```
A; Contents: annotation; X-ray crystallography, 3.0 angstroms, rec; Superfamily: immunoglobulin V region; immunoglobulin homology C; Keywords: heterotetramer; immunoglobulin pyroglutamic acid F;15-98/Domain: immunoglobulin homology c1MM> F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status pre F;22-96/Disulfide bonds: #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Wien, M.W.; Hogle, J.M. submitted to the Brookhaven Protein Data Bank, A;Reference number: A52979; PDB:1FPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: DNA
A; Residues: 1-76 < AF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Reference number: Z20484; MUID:99102612; PMID:9847359 A;Accession: T28269
                                                                                                                                                                                                                                                                                                                     P.; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryr avanagh, T.; Hempel, S.; Kotter, P.; Entian, K.D.; Rieger, M.; Schaeffer, M.; Nature 391, 485-488, 1998
A;Authors: Mueller-Auer, S.; Silvey, M.; James, R.; Montfort, A.; Pons, A.; Puerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Moores, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechmaerhoft, A.; Palme, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Wien, M.W.; Filman, D.J.; Stura, E.A.; Guillot, S.; Delpeyroux, F.; Crainic, R.; Hogle, Nat. Struct. Biol. 2, 232-243, 1995
A;Tille: Structure of the complex between the fab fragment of a neutralizing antibody for A;Reference number: S60066; MUID:95292109; PMID:7539711
A;Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Note: MSV108
A;Cross-references: UNIPROT:023559; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ig heavy chain V region (monoclonal antibody C3, gamma 2A) [vali C;Species: Mus musculus (house mouse) C;Date: 23-Feb-1996 #sequence_revision 10-Oct-1997 #text_change C;Accession: $60067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-references: UNIPROT: Q9YVY4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: preliminary; translated
                                                                        A;Residues: 1-1322 <BEV>
                                                                                                       A; Molecule type:
                                                                                                                                     A; Status: preliminary; nucleic
                                                                                                                                                                            A; Accession: B71440
                                                                                                                                                                                                              C.; Chalwatzis, N.
A; Title: Analysis of 1.9 Mb of contiguous sequence from
A; Reference number: A71400; MUID:98121113; PMID:9461215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Variety:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypothetical protein d14605c - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B71440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:X84698; NID:g773225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: mRNA
A;Residues: 1-123 <WIE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S60067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 8
                                                                                                                                                                                                                                                                                                                                                                                                                                            Accession: B71440
;Accession: B71440
;Bevan, M.; Bancroft, I.; Bent, E.; Love, K.; Goodman, H.; Dean, C.; Bergkamp, ;Bevan, M.; Bancroft, I.; Bent, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, P.; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Schaeffer, M.; P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Species: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            columbia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 YDYDGFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YDYDVGFDY 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YDYD-GFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YDYDGFYY
                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <AFO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             79.4%;
                                                                                                                                                 acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 42;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 40.5;
Pred. No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          from GB/EMBL/DDBJ
                                                                                                                                         sequence not
                                  GB:Z97342; NID:g2245031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL: AF063866; NID: g4049647; PIDN: AAC97654.1; PID: g40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    January 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                             shown;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2A) [validated] - mouse
                                                                                                                                                                                                                                                            chromosome 4 of Arabidopsis
                                  PID:g2245072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-Mar-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                     pot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                 Rechman,
                                                                                                                                                                                                                                                                                                                                                                           Puigdomenech
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                Funk,
                                                                                                                                                                                                                                                                                                                                                                                                                                            R.; Dirks
, N.; Giels
Funk, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (fragment)
                                                                                                                                                                                                                                                                                                                                     Ansc
```

060506 Q7tmk9 Q7tmk9 Q6ns22 Q6nuz3 P70997

bacillus brachydanio

mus musculu xenopus lae

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cotal number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Thu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       on:
  Pred. No. is the number of results predicted by chance to r
score greater than or equal to the score of the result bein
and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB
Bd
                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq
  of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 13:01:23 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length:
                                                                                                                                                                                                                                                                                                                                                                                                                                    %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                is the number of results predicted by chance to have a alor than or equal to the score of the result being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-018-245A-3
51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1612378 seqs,
  March 24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YDYDGFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20000000000
 758
1658
308
574
1126
1322
3320
365
367
533
                                                                                                                                                2005, 08:54:17; Search time 52.75 Seconds (without alignments) 77.661 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
 Q9QZT6
Q9GSL8
Q96SL5
Q9HC86
Q9HC86
Q9HC86
Q8HSV2
Q8CFL3
Q9CWX5
Q9CWX7
Q9CWX7
Q9CWX9
Q9FYM9
Q9FSN3
Q9YV4
Q8RGC0
Q6F7M5
Q9TM9
Q9
                                                                                                                                                                                                                                                                                                                                                                                Q97NB3
Q8CY66
                                                                                                                                                                                                                                                                                                                           Q64Q75
Q43319
Q6DFC0
Q9HC87
                                                                                                                                                                                                                                                                                                                                                                                                                                    IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1612378
005165
0097763
Q8CY664975
Q443319
Q464975
Q464759
Q464660
Q9071116
Q907116
Q907116
Q907116
Q907116
Q907116
Q907116
Q907117
Q907117
Q90717
                                                                                                                                                                                                                                                                                                                                                                                                                                    Description
                                                   9 mycobacteri
1 aedes aegyp
8 treponema d
9 arabidopsis
0 treponema d
                                                                                                                                                                                                                                                                    3 rattus norv
3 homo sapien
5 homo sapien
                                                                                                                                                                                                                                                                                                nus musculu rattus norv
              bacteroides
rattus norv
                                                                                                                                     acinetobact
                                                                                                                                                             melanoplus
                                                                                                                                                                            homo sapien
                                                                                                                                                                                      mus musculu
xenopus lae
                                                                                                                                                                                                                mus musculu
                                                                                                                                                                                                                                           homo sapien
                                                                                                                                                                                                                                                                                                                                                                    bacteroides
                                                                                                                                                                                                                                                                                                                                                                                                          streptococc
                                                                                                                       indian
                                                                                                                                                 fusobacteri
                                                                                                                                                                                                                                                                                                                                        xenopus
                                                                                                                                                                                                                                                                                                                                                       artemisia
                                                                                                                       citr
```

 $\begin{array}{c} 6.623 \\$ 1 TRUA_SPIK
CONUT4
2 Q645K2
2 Q645K2
2 Q640A2
2 Q640A2
2 Q64WP9
2 Q6CB39
3 Q64WP9
2 Q27082
2 Q6CB39
2 Q9V636
Q9LNG0
Q9LNG0
Q9LNG0
Q9AFB6
Q9AFB7
Q9AFB6
Q9AFB6
Q9AFB6
Q9AFB6
Q9AFB6
Q9AFB6
Q9AFB7
Q9AFB6
Q9AFB7
Q9AFB6
Q9AFB7
Q9AFB7
Q9AFB9
Q9AFB VATE_HALN1 TRUA_SPIKU Q8A8X9 Q7P891 Q87448 Q650Y1 Q6TMJ7 Q86182 ACCD_E1 ROQ_HUMAN
ROQ_MOUSE
Q6NS22
Q6NS22
Q6NUZ3
P70997
Q6JHU8
Q7P394
RNNS ASPSA
Q6WDN7
Q9S2Q8
Q6WDN5
Q6WDN5
Q6WDN3
Q6WDN3
Q6WDN3
Q6WDN3
Q6WDN4 Q81ZD4 Q6CWK0 052863 Q61480 Q982q8 Q6wdn5 Q6wdn3 Q6wdn3 Q6wdn4 Q6wdn4 Q9wb6 Q9wb6 Q89xb9 Q7p891 Q87448 Q87448 Q65097 Q876597 Q866682 Q7zx83 Q6spf2 Q7kz75 Q7z130 Q9z130 Q88ab4 Q27690 Q86fi9 Q86fi9 Q8c142 Q8nvh0 Q99sg2 Q7a4f2 Q7a4f2 Q6g714 Q6gex9 Q6gex9 Q9xyy0 Q9tpk9 P38195 Q7kz74 Q6x9z3 Q9afb6 Q9afb7 Q9afb9 Q9afb4 081zd4
084zd2
08zd2
0 Q7p394 P00653 Q6wdn7 Q7ynz6 Q97fk9 052863 Q6jhu8 sus scrofa
clostridium
clostri 4 xenopus lae 2 xenopus lae 2 brachydanio 2 xenopus tro 5 methanosarc d epifagus vi sodalis glo kluyveromyc bacillus an bacillus an halobacteri streptomyce euprymna sc homo sapien plasmodium
arabidopsis
equus cabal
anaerococcu euprymna sc euprymna sc drosophila kluyveromyc thermoanaer pseudomonas methanobact mus musculu rhyzopertha monodelphis anaerococcu drosophila arabidopsis kluyveromyc yarrowia li bacteroides bacteroides dictyosteli dictyosteli chimpanzee oryza sativ bacteroides fusobacteri aspergillus euprymna sc homo sapien saccharomyc anaerococcu anaerococcu tachypleus mus musculu spiroplasma gallus gall fusobacteri

ALIGNMENTS

```
RESULT 1

OUS165

ID 0051

AC 0051

DT 01-J

DT 01-J

DT 01-J

DT 01-O

DE Hypo

OS Stree

OC Stree

OC Stree

OC STRJ

RN (1)

RN (1)

RN SEQU

RC STRJ

RX MEDII

RN SANC

RT 0f %

RL FEMS

RL FEMS

SQ SEQU

SQ SEQU

SGO SEQU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
Q97NB3
                                                                                                      A LO CONTROL O CONTROL CONTROL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
     Matches
                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              005165;
005165;
01-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q97NB3;
Q97NB3;
01-OCT-2001
                                                                                                                                                                                                                                                                                                 STRAIN-ARCC BAA-334 / TIGR4;

STRAIN-ARCC BAA-334 / TIGR4;

REDLINE=21357209; PubMed=11463916; DOI=10.1126/science.1061217;

Tettelin H., Nelson K.E., Paulsen I.T., Bisen J.A., Read T.D.,

Peterson S.N., Heidelberg J.F., DeBoy R.T., Haft D.H., Dodson R.J.,

Durkin A.S., Gwinn M.L., Kolonay J.F., Nelson W.C., Peterson J.D.,

Umayam L.A., White O., Salzberg S.L., Lewis M.R., Radune D.,

Holtzapple E.K., Khouri H.M., Wolf A.M., Utterback T.R., Hansen C.L.

McDonald L.A., Feldblyum T.V., Angiuoli S.V., Dickinson T.,

Hickey E.K., Holt I.E., Loftus B.J., Yang F., Smith H.O., Venter J.(

Dougherty B.A., Morrison D.A., Hollingshead S.K., Fraser C.M.;
                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-OCT-2001 (TrEMBLrel. 18, Creat 01-OCT-2001 (TrEMBLrel. 18, Last 01-UN-2003 (TrEMBLrel. 24, Last Hypothetical protein SP2139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Molecular characterization of PcpA: of Streptococcus pneumoniae."; FEMS Microbiol. Lett. 164:207-214(199 EMBL; Z82001; CAB04757.1; -. Hypothetical protein. SEQUENCE 91 AA; 11056 MW; 7CA9A5C
                                                                                                                                                                             Science 293:498-506(2001).
EMBL; AE007502; AAK76196.1;
PIR; C95250; C95250.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Streptococcus pneumoniae.
Bacteria; Firmicutes; Lac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=98340517; PubMed=9675866; Sanchez-Beato A., Lopez R., Garci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUL-1997
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OrderedLocusNames=SP2139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hypothetical protein.
                                                                                                                                                                                                                                                         pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=1313;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                        TIGR; SP2139; -
                                                                                                                                                                                                                                                                              "Complete genome sequence of a virulent isolate of Streptococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TaxID=1313;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N
Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                   proteome; Hypothetical protein.
108 AA; 13150 MW; 218F51E4BBDAF20A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DYDGFDY 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DYDGFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 04, (TrEMBLrel. 04, (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86.3%;
                     86.3%; Score 44;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lactobacillales; Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   164:207-214(1998).
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Garcia J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7CA9A5C88F33A585 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  novel
                       DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             choline-binding protein
  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 91;
                                                 Length 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                  Hansen C.L.,
                                                                                                                                                                                                                                                                                                                                Venter J.C.,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
  Gaps
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

N

DYDGFDY

Matches

0

Indels

0

Gaps

```
RESULT 4
06407
ID 06407
ID 06406
AC 064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A CONTRACTOR OF THE CONTRACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21429245; PubMed=11544234;
DOI=10.1128/JB.183.19.5709-5717.2001;
Hoskins J., Alborn W.E. Jr., Arnold J., Blaszczak L.C., Burgett Hoskins J., Alborn W.E. Jr., Arnold J., Fuller W., Gering Gilmour R., Glass J.S., Khoja H., Kraft A.R., Lagace R.E., Gilmour R., Glass J.S., Khoja H., Kraft A.R., Lagace R.E., LeBlanc D.J., Lee L.N., Lefkowitz E.J., Lu J., Matsushima P., McAhren S.M., McHenney M., McLeaster K., Mundy C.W., Nicas T.I. Morris F.H., O'Gara M., Peery R.B., Robertson G.T., Rockey P., Sun P.-M., Winkler M.E., Yang Y., Young-Bellido M., Zhao G., Zook C.A., Baltz R.H., Jaskunas S.R., Rosteck P.R. Jr., Skatruc Glass J.I.,
                                                                                                                                                                                                                       Proc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Putative endo-beta-N-acetylglucosaminidase. ORFNames=BF3613;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein spr1948.
OrderedLocusNames=spr1948;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q8CY66;
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8CY66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacteroides fragilis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q64Q75;
25-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Complete proteome. SEQUENCE 108 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AE008559; AAL00750.1; -. PIR; A99715; A99715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptococcus pneumoniae (strain ATCC BAA-255 / Bacteria; Firmicutes; Lactobacillales; Streptoco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2003
                                                                                                                                                     SEQUENCE
                                                                                                                                                                                Kuwahara T., Yamashita A., Hirakawa H., Nakayama H., Kuhara S., Hattori M., Hayashi T., Ohnishi Y.; Kuhara S. Hattori M., Hayashi T., Ohnishi Y.; "Genomic analysis of Bacteroides fragilis reveals extincersions regulating cell surface adaptation."; Proc. Natl. Acad. Sci. U.S.A. 0:0-0(2004).

EMBL; AP006841; BAD50356.1; -
                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=YCH46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=817;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteroidaceae; Bacteroides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteria; Bacteroidetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q64Q75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Genome of the bacterium Streptococcus J. Bacteriol. 183:5709-5717(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=171101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N
7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . Similarity
7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DYDGFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DYDGFDY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DYDGFDY 105
                                                                                                                                                     348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 24, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                     AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13107 MW;
                                                                                                                                                 39951 MW;
                                  86.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bacteroides (class); Bacteroidales;
   Score 44; DB
Pred. No. 23;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 44; DB 2;
Pred. No. 7.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        362F4644BBC30DEC CRC64;
                                                                                                                                                     SADA0761BFF73EF3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pneumoniae strain R6.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                        <u>۷</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 108;
                                                                            Length 348;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R6).
                                                                                                                                                                                                                                                                                                   extensive DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                            Toh H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Skatrud
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Burgett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Burgett S.
Geringer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                Okada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٠;
ز
                                                                                                                                                                                                                                                                                                                                                                            z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                               Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. Negative score sand is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B B
                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . No. is the greater the greater the greater the greater the greater the greater than the g
   length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-018-245A-4
58
1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87.55.32.1
87.55.33.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 is the number of results predicted by chance to have ater than or equal to the score of the result being prived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                               %
Query
Match
2105692 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A Geneseq_16Dec04:*
: geneseqp1980s:*
: geneseqp1990s:*
: geneseqp2000s:*
: geneseqp2001s:*
: geneseqp2002s:*
: geneseqp2003bs:*
: geneseqp2003bs:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24,
                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000000000
 2005, 08:54:17; Search time 91.125 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version
(c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                 BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  386760381 residues
 AAG80314
AAG80314
AAG80318
AAB10004
AAD25666
AAD394357
AAR60780
AAD31869
AD031869
AD031869
AD031867
AD031867
AD031868
AD031869
AD031877
AD031886
AD031886
AD031886
AD031886
AD031887
AAV733591
AAW46482
AAW733591
AAW733591
AAW373291
AAW373291
AAW373291
AAW373291
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ╏
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2105692
 Aag80314
Aag80318
Aab10004
Adj25666
Adb94357
Ads94357
Aar60780
Add91869
Add911869
Add911869
Add911867
Add911867
Add911867
Add91187
Add91187
Add91187
Add911881
Add911891
Add911891
Add911891
Add91891
Add91891
Add91891
Add91891
                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
Anti-huma
H. pylori
Mouse apc
Antibody
H. pylori
Mouse act
Antibody
Fv(GP-2)
Humanised
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  printed,
                                                                                                                                                                                                                                                                                                                                                                                                               Anti-huma
    \begin{array}{c} \sigma \, \sigma \, \sigma \, \sigma \, \sigma \, d \, J \, d 
 AAY30101
AAB81971
ABU56885
AAB81971
AAB81971
AAB81971
AAB81971
AAB81976125
AAR21307
AAB81976125
AAR21307
AAB81976125
AAR36677
AAB81976125
AAR36677
AAR3667
     ADH59675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aay59306
Aab81974
Aab81971
Aar21307
Aar21306
                   Aau72874
Adj49669
Aaw53881
Aaw53882
Ade25804
Adh59661
Adh59682
Ade25837
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Adh62640
Abu56841
Abu56842
Abu49473
Abu45992
Aay05362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aay44993
Adh62642
Adh62641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aar06480
Aar43677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aar06483
Aar43680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aar43679
Aar99649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aar99646
Aaw02188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aar06479
Aar43676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aar06478
Aar43675
Aar99645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aar43674
Aar99644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aar21287
Aab81976
                                                                                                                                                                                      Aaw25783
Aau72866
                                                                                                                                                                                                                         Aay17963
Adr59121
                                                                                                                                                                                                                                                                         Aar21295
Aar21289
                                                                                                                                                                                                                                                                                                          Aar21297
Aar21299
                                                                                                                                                                                                                                                                                                                                            Adr38692
Aar21288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aar43678
Aar99648
                                                                                                                                                                                                                                                                                                                                                                                                                                   Aar79864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aar99647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aar99650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aaw02191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aar05710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aar97377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Abb76125
                                                                                                                                                                                                                                                           Aar21300
                                                                                                                                                                                                                                                                                                                                                                               Adr38687
                                                                                                                                                                                                                                                                                                                                                                                                 Aaw22516
                                                                                                                                                                                                                                                                                                                                                                                                                 Aar79162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aaw02190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aaw02189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aaw02192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aar06482
 An acetyl Gangliosi BoNT/A Hc Gangliosi Gangliosi Gangliosi Gangliosi Murine VL Murine VL Gargliosi Hollow House ant Anti-bGH Murine VL Murine VL Murine Anti-BGR Gangliosi Murine VL Murine Mouse ant TRY40. 9/3 Single chastingle cha
```

```
RESULT 1
AAG80314
AAG
                                                                                                                             RESULT 2
AAG80318
    A X I
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TWF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TWF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TWF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factor-humans. This sequence represents the anti-human tumour necrosis factor-
AAG80318;
                                                                                AAG80318 standard; protein; 108 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG80314 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 12 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic should be approximately treatment of the contract of the contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fukuda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-APR-2000; 2000JP-00117394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anti-human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAG80314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3a; Page 26; 36pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity 100
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                              1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                             TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TNF-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69.0
69.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDR-L1 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nakanishi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ထာထ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH59680
ADH59704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58; DB 5; 1
Pred. No. 0.00056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Adh59680 Chimeric
Adh59704 PAM4 VK |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          toxic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ס
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
RESULT 3
AAB10004
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthitis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factoralpha (TNF-alpha) light chain CDR fragment described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel heavy and light-chain polypeptides of chimeric and antibodies against human tumor necrosis factor alpha for immunogenicity treatment of TNF-related diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 108 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 28-29; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-PSDB; AAI69376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anti-human TNF-alpha L chain CDR region encoding DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-2002
                                                       Acid-resistant microorganism; detection; faecal; intestine; monoclonal antibody; light chain; complementarity determini
                                                                                                                                 01-NOV-2000
                                                                                                                                                                                          AAB10004 standard; protein; 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-066345/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-OCT-2001
             Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SUNR ) SUNTORY LTD
                                                                                                  pylori 26
                                                                                                                                                                                                                                                                   24
                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                                                                              \vdash
                                                                                                                                                                                                                                                                                    TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                   TASSSVSFSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nagahira
                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                    kDa
                                                                                                                                 (first entry)
                                                                                                  protein-binding antibody light chain CDR1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ζ,
                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nakanishi T;
                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                          Score 58; DB 5;
Pred. No. 0.0062;
                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                               Mismatches
                                                         complementarity determining
                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                         Length 108;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           humanized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               toxic shock
                                                       infection; ng region;
                                                                                                     peptide
                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                               0
```

Mar

24

13:01:24 2005

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on:
   Pred. I
score g
and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            score:
                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ,
                                                                                                                                                                                                                                                                                                                                                                                                                           No. is the greater to greater to
   of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued
1: /cgn
2: /cgn
3: /cgn
4: /cgn
5: /cgn
6: /cgn
                                                                                                                                                                                                                                                                                                                                                             Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-018-245A-4
58
1 TASSSVSFSYLH 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                513545 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum Match 0%
Maximum Match 100%
Listing first 100
 Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                    the number
                                                                                                                                                                                                                                                                                                                                                                                                                           than
d by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nued_Patents_AA:*
/cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                           n or equal
analysis o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2005, 08:57:11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74649064 residues
                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ō,
US-08-230-843-2
US-08-636-936-2
US-09-635-2227-237
US-09-681-432-1
US-09-681-755A-5
2455030-3
5455030-3
5455030-7
5455030-7
5455030-13
5455030-13
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-15
5455030-11
US-09-726-219A-257
US-09-726-219A-257
US-09-726-219A-238
                                                                                                                                                                                                                                                                                                                                                                                                                      of
                                                                                                                                                                                                                                                                                                                                                                                                                           results in the terms of the t
                                                                                                                                                                                                                                                      S-08-230-843-2
S-08-636-936-2
S-09-563-222C-35
S-08-659-567-2
S-08-681-432-1
S-09-726-219A-237
S-09-726-219A-237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           - 2005
                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    model
                                                                                                                                                                                                                                                                                                                                                                                                                          s predicted by chance to have e score of the result being putotal score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search time 24.1875 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ltd
          Sequence 2
Sequence 2
Sequence 2
Sequence 2
Sequence 2
Sequence 5
Sequence 5
Sequence 5
Patent No.
Sequence 2:
Sequence 2:
Sequence 3:
                                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                       printed,
 2, Appli

2, Appli

35, Appli

2, Appli

2, Appli

237, Appli

237, Appli

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030

5455030
   4 US-09-726-219A-239
4 US-09-726-219A-249
4 US-09-726-219A-249
4 US-09-726-219A-249
4 US-09-726-219A-249
4 US-09-726-219A-250
9 US-09-726-219A-250
1 US-08-432-694-4
1 US-08-432-694-1
1 US-08-432-694-1
1 US-08-432-694-1
1 US-08-432-694-1
1 US-08-432-694-1
1 US-08-477-728-1
1 US-08-477-728-1
1 US-08-477-728-1
1 US-08-477-728-1
1 US-08-477-728-1
1 US-08-487-200-1
1 US-08-487-200-8
1 US-08-487-200-8
1 US-08-487-200-8
1 US-08-487-200-8
1 US-08-487-200-1
1 US-08-487-200-2
1 US-0
 sequence
 8, Appli
4, Appli
14, Appli
16, Appli
16,
```

US-08-230-843-2

Sequence 2 Patent No.

Application US/08230843

ALIGNMENTS

GENERAL INFORMATION:

```
0
                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                            US-09-563-222C-35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-636-936-2
                                                                                                                                                                                                                                                      Sequence 35, Application US/09563222C Patent No. 6696620
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/636,936
FILING DATE: 24-APR-1996
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION UNMBER: US 08/230,843
FILING DATE: 21-APR-1994
APPLICATION NUMBER: JP 094491/1993
ENITAL DATE: 21-APR-109
                                                                                          APPLICANT: EPICYTE PHARMACEUTICALS, INC.
APPLICANT: HIATT, ANDREW C.
APPLICANT: HEIN, MICH B.
TITLE OF INVENTION: IMMUNOGLOBULIN BINDING
FILE REFERENCE: 068904-0501
CURRENT APPLICATION NUMBER: US/09/563,222C
CURRENT FILING DATE: 2000-05-02
PRIOR APPLICATION NUMBER: 09/563,222
PRIOR FILING DATE: 2000-05-02
NUMBER OF SEQ ID NOS: 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
                                                        PRIOR APPLICATION NUMBER: PCT/US01/14349
PRIOR FILING DATE: 2001-05-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 21-APR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 0:
FILING DATE: 07-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: IMMUNOSUPPRESSANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Arlington
STATE: Virginia
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Oblon, No. 5856140man
REGISTRATION NUMBER: 24,618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH:
                                                                                                                                                                                                                                                                                                                                                                         25
                                                                                                                                                                                                                                                                                                                                                                                                               1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22202
                                                                                                                                                                                                                                                                                                                                                                         TASSSVSSSYLH 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   248855 OPAT UR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAKAZAWA, HARUMI
KANAYAMA, YUKA
SUGAMURA, KAZUO
TAKESHITA, TOSHIKAZU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (703) 413-2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (703) 413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86.2%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP 036065/1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0010-0674-0X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 50; DB 2;
Pred. No. 0.14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                           PROTEIN ARRAYS IN PLANT CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 244;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

US-08-636-936-2 RESULT 2

Sequence 2, Application Patent No. 5856140

Application US/08636936

GENERAL INFORMATION:
APPLICANT: SHIMAM
APPLICANT: HAMURO

SHIMAMURA, TOSHIRO HAMURO, JUNJI

밁

25

TASSSVSSSYLH 36 TASSSVSFSYLH 12 US-08-230-843-2

MOLECULE TYPE: protein

TOPOLOGY:

amino acid

linear

ENGTH:

244 amino acids

Best Loc Matches

Local Similarity

86.2%; 91.7%;

Score 50; I

DB . 1:

Mismatches

 Indels Length 244;

11;

Conservative

Query Match

CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 094491/1993
FILING DATE: 21-APR-1993
PRIOR APPLICATION NUMBER: JP 036065/1994
PRILICATION NUMBER: JP 036065/1994
FILING DATE: 07-MAR-1994
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5582856man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 0010-0674-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-200
TELEFAX: (703) 413-220
TELEE: 24885 OPAT UR
INFORMATION FOR SEQ ID NO: 2:
COOTENCE CHARACTERISTICS:

0010-0674-0X

SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/230,843 FILING DATE: 21-APR-1994 CLASSIFICATION: 514

ZIP: 22202 COMPUTER READABLE FORM:

MEDIUM TYPE:

Floppy disk

COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS

STREET: 1755 S. (CITY: Arlington STATE: Virginia COUNTRY: U.S.A.

CORRESPONDENCE ADDRESS: NUMBER OF SEQUENCES:

ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,

E: P.C. 1755 S. Jefferson Davis Highway, Suite 400

ADDRESSEE:

ITLE OF

INVENTION:

IMMUNOSUPPRESSANT

TOSHIKAZU

TAKESHITA,

SUGAMURA,

KAZUO YUKA HARUMI

NAKAZAWA,

HAMURO, JUNJI KANAYAMA,

SHIMAMURA, TOSHIRO

Thu

Mar

24 13:01:24 2005

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     on:
    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB seq
                                                                                                                                                     Score
                                                                                                                                                                                                                                               Published Applications AA:*

1: /cgm2 6/prodata/2/pubpaa/US07 PUBCOMB.pep:*

2: /cgm2 6/prodata/2/pubpaa/PCT_NEW PUB.pep:*

3: /cgm2 6/prodata/2/pubpaa/US06 PUBCOMB.pep:*

4: /cgm2 6/prodata/2/pubpaa/US07 PUBCOMB.pep:*

5: /cgm2 6/prodata/2/pubpaa/US07 PUBCOMB.pep:*

6: /cgm2 6/prodata/2/pubpaa/US08 NEW PUB.pep:*

7: /cgm2 6/prodata/2/pubpaa/US08 NEW PUB.pep:*

9: /cgm2 6/prodata/2/pubpaa/US08 PUBCOMB.pep:*

9: /cgm2 6/prodata/2/pubpaa/US09 PUBCOMB.pep:*

10: /cgm2 6/prodata/2/pubpaa/US09 PUBCOMB.pep:*

11: /cgm2 6/prodata/2/pubpaa/US09 PUBCOMB.pep:*

12: /cgm2 6/prodata/2/pubpaa/US09 PUBCOMB.pep:*

13: /cgm2 6/prodata/2/pubpaa/US10A PUBCOMB.pep:*

14: /cgm2 6/prodata/2/pubpaa/US10B PUBCOMB.pep:*

15: /cgm2 6/prodata/2/pubpaa/US10B PUBCOMB.pep:*

16: /cgm2 6/prodata/2/pubpaa/US10 PUBCOMB.pep:*

16: /cgm2 6/prodata/2/pubpaa/US10 NEW PUB.pep:*

17: /cgm2 6/prodata/2/pubpaa/US10 NEW PUB.pep:*

18: /cgm2 6/prodata/2/pubpaa/US10 NEW PUB.pep:*

19: /cgm2 6/prodata/2/pubpaa/US10 NEW PUB.pep:*

10: /cgm2 6/prodata/2/pubpaa/US10 PUBCOMB.pep:*

10: /cgm2 6/prodata/2/pubpaa/US10 PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length: 0
length: 2000000000
                                                                                                                                                     %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-018-245A-4
58
1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1407402 segs, 331100923 residues
   81
81
81
81
81
81
81
81
81
81
81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   March 24, 2005, 08:56:15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                     Length
   109
109
109
109
109
109
109
109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapext
 Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search time 69.1875 Seconds (without alignments)
57.427 Million cell updates/sec
                                                                                                                                                     Description
  sequence
4, Appli
19, Appl
54, Appli
7, Appli
8, Appli
9, Appli
10, Appli
11, Appli
12, Appli
17, Appli
17, Appli
18, Appli
19, Appli
10, Appli
    7 US-10-724-274-11
US-10-1724-274-11
US-10-1818-068-18
US-10-1818-068-18
US-10-1818-068-22
US-10-1818-068-22
US-10-1818-068-22
US-10-1818-068-22
US-10-1818-068-26
US-10-1818-
Sequence 11, Appl Sequence 12, Appl Sequence 22, Appl Sequence 23, Appl Sequence 26, Appl Sequence 26, Appl Sequence 27, Appl Sequence 27,
```

```
RESULT 2
US-09-842-776A-19
                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                   US-10-018-245A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-018-245A-4
                      TITLE OF INVENTION: NEW METHOD FOR DETECTING ACID-RESISTANT MICROORGANISMS
TITLE OF INVENTION: IN THE STOOL
FILE REFERENCE: 41735
CURRENT APPLICATION NUMBER: US/09/842,776A
CURRENT FILING DATE: 2002-08-15
PRIOR APPLICATION NUMBER: PCT/EP99/08212
PRIOR FILING DATE: 1999-10-29
NUMBER OF SEQ ID NOS: 64
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 19
LENGTH: 12
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: JP 117394/2000
PRIOR FILING DATE: 2000-04-19
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4
LENGTH: 12
TYPE: PRT
                                                                                                                                                                                  Sequence 19, Application US/09842776A
Publication No. US20040023316A1
GENERAL INFORMATION:
APPLICANT: CONNEX GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/10018245A Publication No. US20040115196A1
                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                             Best Local
                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: FURUDA, Yoshiaki
APPLICANT: NAGAHIRA, Kazuhiro
APPLICANT: NAKANISHI, Toshihiro
TITLE OF INVENTION: Novel recombinant antibody, amino acid sequences of its complemer
TITLE OF INVENTION: determining regions and genes encoding the same
FILE REFERENCE: 46224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/018,245A
CURRENT FILING DATE: 2002-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: mouse FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      991
991
992
993
993
993
993
                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: CDR-L1 of anti-human TNF-alpha antibody
ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                      1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                              l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                            TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-340-189-83

US-10-340-189-185-185-27

US-10-389-155-27

US-10-389-155-28

US-10-389-155-28

US-10-325-696-49

US-10-325-696-51

US-10-389-417-1

US-10-389-417-28

US-10-389-417-28

US-10-389-417-28

US-10-452-357-1

US-10-452-357-8
                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                           Score 58; DB 16;
Pred. No. 0.0012;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                        Length 12;
                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83, Appli
1, Appli
27, Appli
27, Appli
28, Appli
49, Appli
51, Appli
1, Appli
1, Appli
28, Appli
1, Appli
1, Appli
1, Appli
                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                               ; LENGTH: 109
; TYPE: PRT
; ORGANISM: Homo S
US-10-818-068-7
                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-842-776A-54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                 S
                                                                                                                                                                                                                                                                                                                                              US-10-818-068-7
                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-842-776A-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                   24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                108
```

```
; TYPE: PRT ; ORGANISM: Mus musculus US-09-842-776A-54
                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Protein Design Labs
TITLE OF INVENTION: METHODS OF PRODUCTION AND USE OF ANTI-INTEGRIN ANTIBODIES
TITLE OF INVENTION: CONTROL OF TISSUE GRANULATION
FILE REFERENCE: 05882.0186.NPUS01
CURRENT APPLICATION NUMBER: US/10/818,068
CURRENT FILING DATE: 2004-04-02
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin version 3.2
SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 54, Application US/09842776A
Publication No. US20040023316A1
GENERAL INFORMATION:
APPLICANT: CONNEX GMBH
TITLE OF INVENTION: NEW METHOD FOR DETECTING
TITLE OF INVENTION: IN THE STOOL
FILE REFERENCE: 41735
                                                                  Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 64
SOFTWARE: PatentIn Ver. 2
SEQ ID NO 54
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 7, Application US/10818068 Publication No. US20050002930A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/842,776A CURRENT FILING DATE: 2002-08-15 PRIOR APPLICATION NUMBER: PCT/EP99/08212 PRIOR FILING DATE: 1999-10-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Description of Artificial Sequence: OTHER INFORMATION: Complementarity determining region (CDR1) of an OTHER INFORMATION: antibody light chain directed to a 26 KDa-protein OTHER INFORMATION: epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity nes 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
11; Conserv
                         TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TASSSVSFSYLH 12
TASSSVSSNYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TASSSVSSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TASSSVSSSYLH 12
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                        Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86.2%;
                                                                                    81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86.2%;
35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
Pred.
                                                                                    Score 47;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 50; DB 1
Pred. No. 0.31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          core 50; DB red. No. 0.03 Mismatches
                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 11;
0.031;
                                                                                                   BG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 11;
                                                                                                     16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACID-RESISTANT MICROORGANISMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 108
                                                                                                   Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                    0
                                                                                                                                                                                                                                                                                                                                         FOR
```

THE

Mar

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect so
Sequence:
                                                                                                                                                                                                                                                                                                              Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     욧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein - protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01:
  Pred. N
score g
and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             score:
                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq
                                                                                                                                                                                                                                                                                                                                                                greater t
s derived
                                                                                                                                                                                                                                                                                                                                                                                     No.
  оf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length:
length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-018-245A-4
58
1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                             Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                       PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hits satisfying
                                                                                                                                                                                                                                                                                                                                                               is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               283416 seqs, 96216763 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum Match 0%
Maximum Match 100%
Listing first 100
 \begin{smallmatrix} 6 & 1 & 2 & 2 & 2 & 2 \\ 0 & 1 & 2 & 2 & 2 \\ 0 & 1 & 2 & 2 & 2 \\ 0 & 1 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 \\ 0 & 2 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24,
                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20000000000
2005, 08:54:17; Search time 16.875 Seconds (without alignments) 68.421 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                               DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chosen parameters:
                             PH1058
KVMS78
S20651
S217642
S117643
S17663
PH1059
PH1060
B32456
S17635
S17635
S17636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ltd
Description
heavy
kappa
light
light
light
light
chain
 9410401

9531313

9772644

9772644

9772644

9772644

9772644

9772644

9772646

9772646

9772646

9772646

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

977264

97
                 Ig light chain V r
Ig kappa chain prete
hypothetical prote
hypothetical prote
probable translati
Ig kappa chain V r
hypothetical prote
Ig kappa chain V r
```

ALIGNMENTS

```
A;Introns: 17/1
C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap C;Complex: An immunoglobulin heterotetramer subunit consists of two identical light (kap C;Complex: An immunoglobulin bomology c;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer F;1-22/Domain: signal sequence #status predicted <SIG>F;23-129/Product: Ig kappa chain V region (S107B) #status predicted <MAT>F;38-113/Domain: immunoglobulin homology <F:38-113/Domain: <F:38-113/Domain: immunoglobulin homology <F:38-113/Domain: immunoglobulin homology <F:38-113/Domain: immunoglobulin homology <F:38-113/Domain: immunoglobulin homology <F:38-113/Domain: immunog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ig kappa chain precursor V region (S107B) - mouse C;Species: Mus musculus (house mouse) C;Decies: Mus musculus (house mouse) C;Date: 17-Dec-1982 #sequence_revision 17-Dec-1982 #text_change C;Accession: A01943
R;Kwan, S.P.; Max, E.E.; Seidman, J.G.; Leder, P.; Scharff, M.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:Q8K1F1
A;Experimental source: B cell, strain [NZB x NZW]F1
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: immunoglobulin
F;16-91/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R,Tillman, D.M.; Jou, N.T.; Hill, R.J.; Marion, T.N.
J. Exp. Med. 176, 761-779, 1992
A;Title: Both IgM and IgG anti-DNA antibodies are the products of clonally selective A;Reference number: PH0971; MUID:92381444; PMID:1512540
A;Accession: PH1058
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-99 CTILL
A;Residues: 1-99 CTILL
A;Residues: 1-99 CTILL
A;Residues: 1-99 CTILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ig light chain V region (clone 163.72) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 09-Jul-2004
C;Accession: PH1058
            Ig heavy chain
C;Species: Mus
                                                                                                                                                                                                                                                                        묽
                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPROT:P01680; GB:V00780; NID:g51676; PIDN:CAA24157.1; PID:g51677 A;Note: the sequence was determined from the differentiated gene C;Comment: This protein, in which there is a deletion of two amino acids at the V-J real kappa chain S107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cell 26, 57-66, 1981

A;Title: Two kappa immunoglobulin genes are expressed in the myeloma S107

A;Reference number: A01943; MUID:82115300; PMID:6799208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-129 < KWI
                                                                                                  S20651
                                                                                                                                        RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Accession: A01943
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45-111/Disulfide bonds:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                    46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                                                                                            μ
                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1-129 <KWA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 79.3%;
Similarity 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h 86.2%;
Similarity 91.7%;
                                                                                                                                                                                                                                                                    SASSSVSSSYLH 57
                                                                                                                                                                                                                                                                                                                                            TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TASSSVSSSYLH 35
                 w region
                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
(house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 50; DB 2;
Pred. No. 0.014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 46; DB 1;
Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        the V-J rec
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

S

ASSSVSFSYLH

```
C; Mare. 22. 17643
C; Accession: S17643
C; Accession: S17643
R; Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. R; Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. R; Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. R; Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. R; Clackson, T.; Winter, G. R; Winter, 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
S17642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-No.1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
S17643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: immunoglobulin V region; immunoglobulin C;Keywords: heterotetramer; immunoglobulin F;8-83/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Title: Making antibody fragments using phage display libraries A;Reference number: S17230; MUID:91326098; PMID:1907718 A;Accession: S17642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Accession: S17642
R;Clackson, T.; Hoogenboon
Nature 352, 624-628, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Cross-references: EMBL:X65007; NID:g52647; PIDN:CAA46140.1; PID:g52648; EMBL:X65010; NIC;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 23-Jul-1999 C;Accession: S20651; S20647 R;Losman, M.; Fasy, T.M.; Novick, K.E.; Monestier, M. submitted to the EMBL Data Library, Pebruary 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: nucleic acid
A; Residues: 1-93 < CLA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-86 < LOS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Description: Relationships among antinuclear antibodies A;Reference number: S20639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S20651
                                                                                                                                                                                                                                         A; Molecule type: nucleic acid
A; Residues: 1-93 <CLA>
                                                                                                                                                                                                                                                                                                   A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Status: preliminary
                                                                                                                                     ;Superfamily: immunoglobulin V region; immunoglobulin homology;Keywords: heterotetramer; immunoglobulin;8-83/Domain: immunoglobulin homology <IMM>
                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASSSVSFSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ASSSVSSSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASSSVSSSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hoogenboom, H.R.; Griffiths,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77.6%;
                                     77.6%;
90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 45; DB Pred. No. 0.11 0; Mismatches
          Score 45; DB 2;
Pred. No. 0.12;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 45; DB 2
Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A.D.; Winter,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
             ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 86;
                                                                    Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>ດ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune MRL mice reacti
          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥.
          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
             0
```

P01675 P01676 P01677 P01678 P04940 P04941 P04942 P04944 P04944 Q8K1f0 O58115 Q8K1f0

musculu musculu musculu musculu musculu

mus

musculu musculu

musculu

brachydanio drosophila

```
Thu
```

Mar

24 13:01:24 2005

Result No. Minimum Maximum Database Total number of hits satisfying chosen parameters: Scoring table: sequence: Title: Perfect score: Run OM protein Post-processing: 6 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. Score seq - protein search, using length: % Query Match US-10-018-245A-4 58 1 TASSSVSFSYLH 1: UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* 1612378 seqs, Gapop 10.0 , BLOSUM62 March Minimum Match 0% Maximum Match 100% Listing first 100 TASSSVSFSYLH 12 Copyright 24, Length 0 2000000000 2005, 08:54:17; Search time 79.125 Seconds (without alignments) 77.661 Million cell updates/sec GenCore version (c) 1993 - 2005 ВB Gapext 512079187 residues YM27_YEAST G6PI_LISIN G6PI_LISMO Q71XG1 Q8X5L0 Q7XV72 Q7XV79 Q960P5 Q960P5 Q960P5 Q960P8 Q960P8 EFG1 SI Q9GYK2 Q6Q983 ATH4 NI Q8L8R2 Q9M9T4 Q6ISB6 Q8VDD0 Q6IKM8 Q08003 Q8WSF4 Q9WIP7 KV4A M Q82CX6 Q8VAB9 Q8K1F1 Q9JL78 Q811C3 ₩ summaries 0.5 MOUSE model SCHPO ARATH 5.1.6 Compugen Ltd. 1612378 901680 08vab9 08vab9 08k1f1 09k1f1 09k1f2 0911c3 0915z1 099yk2 099yk2 069yk2 070yk2 Description saccharomyc listeria in listeria mo listeria mo ralstonia s cryza sativ cryza sativ caenorhabdi unidentifie arabidopsis arabidopsis arabidopsis drosophila drosophila oryza sativ drosophila mus musculu drosophila oryza mus musculu mus musculu white mus musculu drosophila drosophila saccharomyc arabidopsis synechocyst aeropyrum streptomyce sativ pot שׁ $\begin{array}{c} \mathbf{5} \\ \mathbf{6} \\ \mathbf$ 107 107 107 107 107 107 107 107 112 173 212 Q7QSI8 KV6K_MOUSE UNI PEA QGJ728 PIG DROME G151 HUMAN QBSU14 QBSU14 QBSU302 QB1302 QB1302 QB1302 QB1302 QB1302 QB1302 QB1302 QB1504 QB2514 QB3981 QB3981 QB3981 QB15714 QB8951 QB15714 QB9581 QB15714 QB15714 QB15714 QB15717 QB1571 Q8LJN1
Q8WQ50
Q8WQ50
Q76501
Q40291
Q40291
Q40291
Q77CCJ3
Q98SA2
Q61G92
Q61G92
Q81JN5
Q8LJN5
Q8LJN5
Q8LJN5
Q8LJN5
Q8LJN5 Q8K1F0 O58102 Q8RS38 Q9RKU3 Q7RBU2 Q9DSU0 Q7XAA4 Q8L7F7 Q6K2K4 Q8KU34 Q8KU34 Q23901 Q869S5 OOFPCR6
OOFPCR6
OOFPCR6
KV6A MOUSE
KV6B MOUSE
KV6B MOUSE
KV6F MOUSE ALIGNMENTS

07xaa4 0817f7 06k2k4 08ru34 08ru34 023901 086985 09n8m6 081jn1 08wqp2 076501 040291 081p84

trypanosoma oryza sativ anopheles glytechinus

Q9dsu0

pyrococcus burkholderi

oryza sativ plasmodium

o ascovirus d oryza sativ arabidopsis oryza sativ oryza sativ dictyosteli dictyosteli

Q988a2 Q61g92 Q8r1z6 Q70j53

7 leptospira 3 mus musculu 7 leptospira 9 pisum sativ

oryza sativ

beta vulgar drosophila homo sapien encephalito

1 beta vulgar
4 drosophila
1 alpha prote
3 staphylococ
2 guillardia
2 drosophila
6 haemophilus
3 haemophilus
5 oryza sativ

Q81195
Q61195
Q62147
Q72107
Q72107
Q78601X3
Q86101X3
Q861559
Q651728
Q244342
Q844342
Q844342
Q8461640
Q881144
Q881342
Q846164
Q881342
Q846164
Q881576
Q8747259
Q74259
Q74259
Q74259
Q74259
Q74259
Q74259
Q74259
Q74259

beta vulgar dictyosteli

candida gla bacteroides

קי

streptomyce anopheles g plasmodium coxiella bu

ashbya goss giardia lam plasmodium plasmodium

staphylococ staphylococ staphylococ meleagrid h

oryza sativ drosophila giardia lam

musculu

plasmodium oryza sativ heliobacill

SO DER REPRENTATION OF THE PROPERTY OF THE PRO

```
KYVAL

KYVAL

KYVAL

AC POIL

DT 15:-

CC -!-

DR FIND

DR FIND
  GERRARE
                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KV4A MOUSE
P01680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUL-1986 (Rel. 01, Creat
21-JUL-1986 (Rel. 01, Last
15-JUL-1999 (Rel. 38, Last
15 Kappa chain V-IV region
Mus musculus (Mouse)
              Q82CX6 PRELIMINARY; PRT; 428 AA. Q82CX6; 01-JUN-2003 (TrEMBLrel. 24, Created) 01-JUN-2003 (TrEMBLrel. 24, Last sequence update) 01-MAR-2004 (TrEMBLrel. 26, Last annotation update) Putative ROK-family transcriptional regulator.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Ewthe European Bioinformatics Institute. There are no restrues by non-profit institutions as long as its content
OrderedLocusNames=SAV5212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00047; ig; 1.
SMART; SM00406; IGV; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PIR; A01943; KVMS7B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kwan S.-P., Max E.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=82115300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR007110; Ig-like
InterPro; IPR003596; Ig_v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HSSP; P01679; 2FBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mmunoglobulin
                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    o kappa immunoglobulin genes are expressed in the myeloma S107.", 1 26:57-66(1981).

MISCELLANGOUS: This protein, in which there is a deletion of two amino acids at the V-J recombination site (after position 118), synthesized but not secreted in cells that express and secrete the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 normal kappa chain S107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J00577; AAA38780.1; -. V00780; CAA24157.1; -.
                                                                                                                                                                                                                                                46
                                                                                                                                                                                                                                                                                        \vdash
                                                                                                                                                                                                                                                                                                                                       10;
                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              non-profit institutions as long and this statement is not removed.
                                                                                                                                                                                                                                                                                        TASSSVSFSYLH 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            requires a license agreement
                                                                                                                                                                                                                                                SASSSVSSSYLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              ΑĄ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PubMed=6799208; DOI=10.1016/0092-8674(81)90033-7; E., Seidman J.G., Leder P., Scharff M.D.; globulin genes are expressed in the myeloma S107."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                129
129
45
57
72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          111
118
128
111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chordata; Craniata; Vertebrata; Euteleostomi; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                              13833
                                                                                                                                                                                                                                                                                                                                                          79.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence update) annotation update) S107B precursor.
                                                                                                                                                                                                                                                                                                                                     1.
                                                                                                                                                                                                                                                                                                                                                                                 Score 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Complementarity-determining-3 Framework-4.
By similarity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Framework-2.
Complementarity-determining-2
                                                                                                                                                                                                                                                                                                                                                            Pred. No. 0.57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Complementarity-determining-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Framework-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ig kappa ch
Framework-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                           E4BB73072DCF6BE4 CRC64;
                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chain V-IV region S107B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         moveq. usage by and for commercial
(See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Usage
                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                               Length 129;
                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           restrictions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TEMBL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           secrete the
                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     outstation
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      commercial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                     0;
```

```
RESULT
Q8VAB9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                        SEQUENCE FROM N.A.

MEDLINB=20517548; PubMed=11062040; DOI=10.1006/viro.2000.0597;
TBai M.F., Yu H.T., Tzeng H.F., Leu J.H., Chou C.M., Huang C.J.,
Wang C.H., Lin J.Y., Kou G.H., Lo C.F.;
"Identification and characterization of a shrimp white spot synd:
virus (WSSV) gene that encodes a novel chimeric polypeptide of
cellular-type thymidine kinase and thymidylate kinase.";
                                                                                                                                                                                                                                                                              MEDIINE=21548311; PubMed=11689662;
DOI=10.1128/JVI.75.23.11811-11820.2001;
Yang F., He J., Lin X., Li Q., Pan D., Zhang X
"Complete genome sequence of the shrimp white virus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Omura S., Ikeda H., Ishikawa J., Hanamoto A., Takahashi C., Shinose M., Takahashi Y., Horikawa H., Nakazawa H., Osonoe T Kikuchi H., Shiba T., Sakaki Y., Hattori M.; Water of an industrial microorganism Streptomyces avermitilis: deducing the ability of producing secondary metabolites.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAR-2002 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
05-JUL-2004 (TrEMBLrel.
Wsv506 (WSSV031).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q8VAB9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             microorganism Streptomyces avermitilis.";
Nat. Biotechnol. 21:526-531(2003).
EMBL; AP005042; BAC72224.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=22608306; PubMed=12692562; Ikeda H., Ishikawa J., Hanamoto A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Streptomyces avermitilis.

Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Streptomycineae; Streptomycetaceae; Streptomyces.
MEDLINE=21844071; Pul
Chen L.L., Leu J.H.,
                                                                              cellular-type thymidine kin
Virology 277:100-110(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=92652;
                                                                                                                                                                                                                                                                                                                                                                                                                                            White spot syndrome virus (
Viruses; dsDNA viruses, no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q8VAB9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sakaki Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=MA-4680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=MA-4680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=21477403; PubMed=11572948;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=33903;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS01125; ROK; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR000600; ROK.
InterPro; IPR009058; Wing_hlx_DNA_bnd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Complete genome sequence and comparative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Proc. Natl. Acad. Sci.
                                                                                                                                                                                                                                                               Virol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     271 ASSSASFAYLH 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF00480; ROK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y., Ishikawa J., Hanamoto
Y., Hattori M., Omura S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ASSSVSFSYLH
                                                                                                                                                                                                                                                               75:11811-11820(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eda H., Ishika
Takahashi Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
  PubMed=11853398; DO:
H., Huang C.J., Chou
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42624 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (WSSV).
                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA stage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence up
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 46; L
Pred. No. 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98:12215-12220(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E4489F17A8CBA0FA CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8; DOI=10.1073/pnas.211433198; Hanamoto A., Takahashi C.,
  DOI=10.1006/viro.2001.1273;
hou C.M., Chen S.M., Wang C.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shinose M., Kikuchi H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Nimaviridae; Whispovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74
                                                                                                                                                                                                                                                                                                                         Zhang X.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ይ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             analysis of the industrial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                      apot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 428;
                                                                                                                                                                                                                                                                                                                         Xu X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                      bacilliform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Osonoe T.,
                                                                                                                         syndrome
of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shiba T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
```

0

밁

S

PRESENTATION OF THE PRESEN

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                 Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect so
Sequence:
                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                                                                                 Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                        Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein - protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92:
Pred. No. score grea and is der
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   score:
                                                                                                                                                                                                                                                                                                                                                                                 DB
BG
                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                seq
                                                                                                                                                                                                                                                greater than
                                                                                                                                                                                                                                         derived
                                                                                                                                                                                                                                                                                                                                                                                                        얁
                                                                                                                                                                                                                                                                                                                                                                                length:
                                                                                                                                                                                                                                                                     A Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2001s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-018-245A-5
38
1 YSTSNLAS 8
                                                                                                                                                                                                                                        is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                     Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                      hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
Gapop 10.0 ,
              100.
                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                 Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                      2105692 seqs, 386760381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                20000000000
2005, 08:54:17; Search time 60.75 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext
                                                                                                                                                                                                    BB
                                                                         AAC80315
ABU56871
ABU568871
ABU56883
AAW89175
AAR07319
AAW14487
AAR02672734
ABG72734
                     ADR15134
ADR15137
ADR15136
ADR15135
ADR15135
AAW41401
AAW41400
AAW41390
        AAW41397
AAB83167
                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M S3
                                                                                                                                                                                                                                                                                                                                                   summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                       2105692
Abu56882
Abu56883
Aaw89175
Aa104389
Aaw14487
Aa299876
Aa299876
Aa299876
Aa299876
Aa299876
Aa299876
Aa403182
Aae13144
Aaw03182
Aae13144
Aaw15136
Adx15136
Adx15136
Aaw141400
Aaw41390
Aaw41390
Aaw41390
Aaw41390
Aaw41390
Aaw41397
Aab83157
                                                                                                                                                                                                   Description
                                                                                                                                                                                    Aag80315
Anti-huma
BONT/A HC
BONT/A HC
BONT/A HC
BONT/A HC
Anti-p53
VK domain
Monoclona
Light cha
Mouse U16
Guy's 13
Humanised
Antigen-b
VEGF bind
Mouse ant
House ant
House ant
House ant
Humanised
Humanised
Humanised
Anti-CEA
Anti-CEA
Anti-CEA
Anti-CEA
Anti-CEA
Anti-CEA
Gangliosi
Mouse gan
 AAR21293
AAR21294
AAR21294
AAR21294
AAR213884
AAR21393
AAR21398
AAR21393
AAR21393
AAR29306
AAR21306
AAR21307
AAR21306
AAR21307
AA
                                                                                                                                                                                                                                                                                                   Aab81974
Aab81971
Aau81278
Abu63531
Adh59678
Adh59710
Adh59707
Adq31869
                                                                                                                                                                                                                                                                                                                                                                 Adh59675
Adh59680
Adh59704
Adk18202
Adkj25650
                                                                                         Aaw73181
Aaw73173
Aaw73174
                                                                                                                                       Aay28385
Aay28357
Ads94357
                                                                                                                                                                                   Aar25958
Aab82702
Aae13146
                                                                                                                                                                                                          Adk18144
Adj54097
Adr38684
                                                                                                                                                                                                                                                       Adq31871
Adq31868
Adq31867
Adq31870
Aar21306
Aar21287
                                                                                                                                                                                                                                                                                                                                                                                                       Aau74413
Aag80318
Abj26725
Ade25838
Ade25837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aar79884
Aaw41388
Aab10021
Aaw73185
Aaw73179
Aaw73180
Aaw73180
Aay28376
Aay28381
Aay28375
Aay28377
Aay28379
Aay28380
                                                                                                                                                             Aae25966
Aar53329
                                                                                                                                                                                                                                 Aar21304
Aar30147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aag63987
Abr40159
Adg64762
Adr38671
Adr38683
                                                                                                                Aaw731
                                                                                                                                                                                                                                                 Aar2
                                                                                                                        Aaw73184
                                                                                                                               Aaw73176
                                                                                                                                                                             Aae28917
                                                                                                                                                                                                                                                                                                                                                                                                                                             Aae25956
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aay97236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aay90815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aay53591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aar21290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aar21294
Amino aci
Humanised
Cl mouse
Mouse lig
Mouse lig
Mouse lig
Mouse lig
Mouse lig
Murine VL
Anti-CEAR
Anti-CEAR
Anti-CEAR
Anti-CH
Anti-Bart
Anti-GEAR
Anti-Alph
Anti-Ing
Anti-Ing
Mouse ant
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Anti-Ing
Mouse act
Gangliosi
Murine VL
Murine VL
Murine VL
Murine VL
Anti-Ing
Mouse act
Gangliosi
I Gangliosi
Humanised
```

```
KESULT 2
ABUS6882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
AAG80315
                                                                                                                           Ś
                                                                                                                                                                                                                    P X E
                                                                                                   밁
                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                           This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factoralpha (TNF-alpha) light chain CDR1 designated CDR-L2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
ABU56882;
                           ABU56882 standard; protein; 55 AA
                                                                                                                                                                                                                   Sequence 8 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fukuda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-APR-2000; 2000JP-00117394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAG80315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAG80315 standard; peptide; 8
                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3b; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38
38
                                                                                                                                                           Similarity 100
8; Conservative
                                                                                                                              YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TNF-alpha CDR-L2 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       26; 36pp; Japanese
                                                                                                                                                        100.0%; S
100.0%; P
ative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130
130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nakanishi T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         æΝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY28382
ADQ31877
                                                                                                                                                      Score 38; DH 5; Pred. No. 1.8e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                      Length 8;
                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aay28382 Human chi
Adq31877 Antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  toxic shock
                                                                                                                                                         0,
                                                                                                                                                        Gaps
                                                                                                                                                         0
```

```
RESULT 3
ABU56871
                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Thes 8; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC clone $25, C25, C39, 1C6 and clone 1F3, where the antibody binds to and CC neutraliese botulinum neurotoxin type A (BoNT/A). Also included are a CC polypeptide comprising BoNT/A neutralising epitope comprising an epitope CC which is specifically bound by the antibody, where the polypeptide is not a full-length botulinum neurotoxin H c fragment and making an anti-BONT/A CC an epitope specifically bound by an antibody expressed by any of the CC an epitope specifically bound by an antibody expressed by any of the CC epitope). The antibody is useful for neutralising a BONT/A, by contacting botulinum neurotoxin type A with the antibody comprising VH CDR (heavy CC chain variable region complementarity determining region) and with a CC second anti-BONT/A antibody which comprises a VH CDR, where the second CC antibody. The antibody is useful in the treatment of pathologies associated with botulinum neurotoxin poisoning, for rapid contacting c detection/diagnosis of botulinum and in the treatment of pathologies contacting the present sequence is a light chain variable region (VL) of a single chain the first anti-BONT/A comprises and in the comprises of pathologies are present sequence is a light chain variable region (VL) of a single chain the first anti-BONT/A contactive of a Clostridium botulinum infection of the organism and in the present sequence is a light chain variable region (VL) of a single
ABU56871;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       an epitope specifically bound by an anti-
clone S25, C25, C39, 1C6 and clone 1F3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel antibody that specifically binds and neutralizes botulinum neurotoxin type A useful for neutralizing botulinum neurotoxin and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Botulinum neurotoxin type A; BoNT/A; mouse; light chain variable region; scFv; antibody; botulism; antibacterial; single chain antibody; VL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 9; Page 23; 31pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-182618/18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BONT/A Hc binding antibody scTv VL region from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-APR-2003
                                                         ABU56871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chain antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated antibody that specifically binds to an epitope specifically bound by an antibody expressed by a clone such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2002155114-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MARK/) MARKS J D.
(AMER/) AMERSDORFER P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .mmunoglobulin.
                                                                                                                                                                                                                 48
                                                                                                                                                                                                                                                                           1 YSTSNLAS
                                                      standard; protein; 55
                                                                                                                                                                                                                 YSTSNLAS 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  botulism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA;
                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-00144886.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-00144886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (scFv)
                                                                                                                                                                                                                                                                              œ
                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ש
                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                            Score 38;
Pred. No.
                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2G5 #1
                                                                                                                                                                                                                                                                                                                                                                                                     Length 55;
                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             as
```

밁 S

0

04-APR-2003

(first entry)

24

13:01:25

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on:
        Pred. Ne score quand is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
BG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No. is the greater to greater to the greater to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Issued
1: /cgn
2: /cgr
3: /cgr
4: /cgr
5: /cgr
6: /cg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-018-245A-5
38
1 YSTSNLAS 8
hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the number of resur than or equal to ed by analysis of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jued_Patents_AA:*
/cgn2_6/ptcdata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6COMB.pep:*
/cgn2_6/ptcdata/1/iaa/pcTUS_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/bcTUS_COMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
      2005, 08:57:11; Search time 16.125 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    results predicted by chance to have a l to the score of the result being printed, of the total score distribution.
         $-09-312-157-12
$-09-717-888-12
$-09-717-888-12
$-09-798-689-8
$-09-171-945-65
$-09-171-945-65
$-09-171-945-65
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-171-945-9
$-09-1726-219A-244
$-09-232-290-7
$-09-343-698-8
$-09-726-219A-237
$-09-726-219A-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                          -08-308-494A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tr d
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
      sequence
   15, Appl
12, Appl
12, Appl
12, Appl
13, Appl
61, Appl
65, Appl
65, Appl
7, Appl
8, Appl
9, Appl
9, Appl
19, Appl
19, Appl
19, Appl
19, Appl
10, Appl
10, Appl
25, Appl
26, Appl
27, Appl
28, Appl
29, Appl
20, Appl
21, Appl
21, Appl
22, Appl
23, Appl
24, Appl
25, Appl
26, Appl
27, Appl
28, Appl
29, Appl
20, Appl
21, App
         US-09-798-689-21
US-08-230-683-2
US-08-230-936-2
US-08-230-936-2
S455030-9
5455030-9
5455030-1
US-08-661-052-16
US-09-128-082-16
US-09-128-082-16
US-09-128-082-16
US-09-128-082-34-50
US-09-128-082-34-50
US-09-344-050-66
US-08-473-728-1
US-08-477-728-1
US-08-477-728-1
US-08-477-728-1
US-08-477-728-1
US-08-477-728-16
US-08-477-728-16
US-08-477-728-16
US-08-477-728-16
US-08-477-7484B-163
US-08-477-484B-163
US-08-477-484B-163
US-08-477-484B-163
US-08-477-531B-50
US-08-477-531B-50
US-08-477-531B-50
US-08-477-531B-50
US-08-646-360-163
US-08-646-360-163
US-08-646-360-163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-630-820-6
US-09-273-453-6
US-09-53-755A-5
5455030-3
5455030-5
5455030-5
5455030-5
US-09-171-945-17
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
US-09-171-945-97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 6
Sequence 5
Sequence 5
Patent No.
Patent No.
Patent No.
Sequence 5
Sequence 9
Sequence 9
Sequence 9
Sequence 9
Sequence 9
Sequence 9
Sequence 2
Sequence 2
      Patent No.
Patent No.
Patent No.
Patent No.
Sequence Sequ
      6, Appli
5, Appli
6, Appli
6,
```

ALIGNMENTS

```
RESULT 2
US-08-434-000A-12
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1
                                                                                                                                                                                                                                                                                                                                                                         US-08-308-494A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-308-494A-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15, Appli
Patent No. 5959083
Sequence 12, Application US/08434000A

Patent No. 6046037

GENERAL INFORMATION:
APPLICANT: ANDREW C. HIATT, JULIAN
APPLICANT: K.-C. MA, THOMAS LEHBER
TITLE OF INVENTION: IMMUNOCIOBULINS CONTAINING PROTECTION
TITLE OF INVENTION: PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PILING DATE: 21-SEP-1994
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/891,739
FILING DATE: 01-JUN-1992
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 05
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/308,494A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: 1i MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: DE PA
FILING DATE: 03-JUN-1991
ATTORNEY/AGENT INFORMATION:
NAME: Kullk, David J.
REGISTRATION NUMBER: 36,5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Tetravalent Bispecific Rece
TITLE OF INVENTION: Preparation and Use Thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Dunner
STREET: 1300 I Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                   45 YSTSNLAS 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Washington
                                                                                                                                                                                                                                                                                               æ
                                                                                                                                                                                                                                                       YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08308494A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seeman, Gerhard
                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bosslet,
                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                         peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                             100.0%; Score 38; DB 2; Length 100; 100.0%; Pred. No. 0.97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tetravalent Bispecific Receptors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DE P4118120.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36,576
                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05552-1186-02000
                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                             0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The
                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                             0;
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                               RESULT 3
                                                                                                                                                                                                                                                                                                                                US-09-312-157-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-434-000A-12
                                                                                                                                                                                                                                                                               Sequence 12, Application US/09312157
Patent No. 6303341
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEX: SEQUENCE LISTING INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 12/30/94
ATTORNEY/AGENT INFORMATION:
NAME: Guise, Jeffrey W.
REGISTRATION NUMBER: 34,613
REFERENCE/DOCKET NUMBER: 212/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 552-8400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 105 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 105 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: (619) 552-0159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 67-3510
TELEX: SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: IBM P.C.
                                                                                                                                                                               NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                              APPLICANT: ANDREW C. HIATT, JULIAN
K.-C. MA, THOMAS LEHNER
TITLE OF INVENTION: IMMUNOGLOBULINS CONTAINING PROTECTION
PROTEINS IN PLANTS AND THEIR USES
                                                                                                                                                                                                                                                                                                                                                                                                 48
                                                                                                                                                                                                                                                                                                                                                                                                                       1 YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90071
                                                                                               CITY: Los Angeles
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                 YSTSNLAS 55
                                                               COUNTRY: U.S.A.
ZIP: 90071
                                                                                                                                                STREET: 633 West Fifth Street
COMPUTER: IBM Compatible
                                                                                                                                                                ADDRESSEE: Lyon & Lyon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                            Suite 4700
                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A: including
A: described
08/367,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/08/434,000A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               212/127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Guy's 13 Карра
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 38;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOS 5.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               application below:
                                  1.44 Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

```
30
\omega
86.8
93
```

31 31 32 33 33 34 33 36 38 38 38 38 38 38 38 38 38 38	Ig kappa chai Ig kappa chai Ig kappa chai Ig light chai Ig kappa chai	% Query Query Score Match Length DB ID Score Match Length DB ID 38 100.0 91 2 S17630 38 100.0 91 2 S17626 38 100.0 93 2 S17641 39 100.0 93 2 S17641 30 100.0 93 2 S17641 30 100.0 93 2 S17641 31 100.0 93 2 S17641	2: pir2:* 3: pir3:* 4: pir4:* 9red. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	seq lengt ssing: Min Man Lin PII	d: 283416 s umber of hits sat DB seq length: 0	Title: US-10-018-245A-5 Perfect score: 38 Sequence: 1 YSTSNLAS 8 Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5	GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd. OM protein - protein search, using sw model Run on: March 24, 2005, 08:54:17 ; Search time 11.25 Seconds (without alignments) 68.421 Million cell updates/sec
######################################	1 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	70 71 72 73 74 76	5 6 5 6 5 4 6 2 2 1	6 U U U U U U U U U U U U U U U U U U U	55 55 55 55 55 55 55 55 55 55 55 55 55	444444 75040 750400	4 3 3 3 5 5 4 3 2 7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				
111111							
	114607600	11 495694	41172111	311111	108 109 120 123	108	93 93 93 93 93 93 93 93
SSI							
100 100 100 100 100 100 100 100 100 100	300790 30	32881 35069 37210 37210 34516 34516 31085 318333	38601 73440 70404 F0405 13513 13513 15371 15371 1667 16173	20653 20650 54378 11122 1122 18720 13410 12513 12513	\$0069 13699 56536)5269	13695 13698 26338 29583 20278	17635 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634 17634

Ig kappa chain V r
Ig light chain V r
Ig kappa chain V r

ALIGNMENTS

```
Ig kappa chain V region - mouse
(;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
C;Accession: S17630
R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G.
Nature 352, 624-628, 1991
A;Title: Making antibody fragments using phage display libraries.
A;Reference number: S17230; MUID:91326098; PMID:1907718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
C;Accession: S17626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: nucleic acid
A;Residues: 1-91 <CLA>
A;Residues: 1-91 <CLA>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                   R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. Nature 352, 624-628, 1991
A;Title: Making antibody fragments using phage display libraries. A;Reference number: S17230; MUID:91326098; PMID:1907718
A;Accession: S17642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Molecule type: nucleic acid
A;Residues: 1-91 <CLA>
A;Residues: 1-91 <CLA>
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
F;8-81/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. Nature 352, 624-628, 1991
A;Title: Making antibody fragments using phage display libraries.
A;Reference number: S17230; MUID:91326098; PMID:1907718
                                             A; Molecule type: nucleic acid
A; Residues: 1-93 < CLA>
                                                                                                                                                                                                                                           Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000
C;Accession: S17642
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            F;8-81/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession:
                                                                                               A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S17626
;Superfamily: immunoglobulin V region; immunoglobulin homology;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                         Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S17630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YSTSNLAS 47
                                                                                                                                                                                                                                                                                                                                                                                                                                          YSTSNLAS 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 38; DB 2
100.0%; Pred. No. 0.16;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 38; DB 2;
Pred. No. 0.16;
Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 2; Length 91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
Ig kappa chain V region - mouse (Species: Mus musculus (house mouse) (;Species: Mus musculus (house mouse) (;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 21-Jan-2000 C;Accession: $17641
R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G.
Nature 352, 624-628, 1991
A,Title: Making antibody fragments using phage display libraries.
A,Reference number: $17230; MUID:91326098; PMID:1907718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G. Nature 352, 624-628, 1991
A;Title: Making antibody fragments using phage display libraries A;Reference number: S17230; MUID:91326098; PMID:1907718
A;Accession: S17640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
S17640
            Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change
C;Accession: S17623
R;Clackson, T.; Hoogenboom, H.R.; Griffiths, A.D.; Winter, G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ig kappa chain V region - mouse
C;Species: Mus musculus (house mouse)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change
C;Accession: S17640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;8-83/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                        C;Superfamily: immunoglobulin V region; immunoglobulin homology C;Keywords: heterotetramer; immunoglobulin F;8-83/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                      RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: nucleic acid
A;Residues: 1-93 <CLA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: nucleic acid
A;Residues: 1-93 <CLA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Accession: S17641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     F;8-83/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity nes 8; Conserv
                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42
                                                                                                                                                                                                   42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 YSTSNLAS 8
                                                                                                                                                                                                                                        1 YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YSTSNLAS 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YSTSNLAS 49
                                                                                                                                                                                                   YSTSNLAS
Hoogenboom, H.R.; Griffiths, A.D.; Winter, -628, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                     49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 38; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                100.0%; Score 38; DB 2
100.0%; Pred. No. 0.17;
cive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 38; DB 2
Pred. No. 0.17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
0.17;
                                                                                                                                                                                                                                                                                                                   DB 2; Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-Jan-2000
                                                            21-Jan-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

24 13:01:25 2005

```
Result
No.
                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run
                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                               Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                      Cotal number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                    of hits satisfying chosen parameters:
                                                                                                                                                                                                                %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-018-245A-5
38
                                                                                                                                                                                                                                                                                                                                                                                                                                                      March 24, 2005, 08:54:17 ; Search time 52.75 Seconds (without alignments) 77.661 Million cell updates/sec
                                                                                                                                                                                                                                                                                 UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                   1612378 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                  Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                         YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                 멂
                                                                                                                                                                                                                                                                                                                                                                                                  Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                    512079187 residues
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                      1612378
                                                                                                                                                                                                                 Description
 0707G5
0707G5
0707G7
0707G7
0707G7
077G7
0
```

	0000	March	March bengun bb	6	F 5	Description
_	38	100.0	112	N	Q8K1F2	Q8k1f2 mus musculu
N	38	100.0	114	N	Q8K1F1	mus
ω	38	100.0	131	Ŋ	Q811C3	mus
4	35	92.1	97	N	Q9JL76	mus
ហ	35	92.1	253	N	QBIC42	Q8ic42 plasmodium
6	34	89.5	106	N	Q9U410	
7	34	89.5	108	μ	KV6K MOUSE	
8	S.	86.8	101	N	Q9JL78	Q9j178 mus musculu
9	33	86.8	112	N	Q8K1F3	mus
10	32	84.2	940	N	Q6CS17	klu
11	32	84.2	1048	N	Q9LBQ9	Q91bq9 arthrobacte
12	32	84.2	1051	N	P70745	P70745 arthrobacte
13	32	84.2	1266	N	Q6BHV0	Q6bhv0 debaryomyce
14	32	84.2	1356	μ	ROM2_YEAST	P51862 saccharomyc
15	31	81.6	32	N	Q77UV0	Q77uv0 lactate deh
16	31		32	N	Q9YJP6	
17	31		103	۳	YA40_MYCPN	P75074 mycoplasma
18	31	81.6	265	N	Q8YDZ0	_
19	31	81.6	388	N	Q9KIS6	Q9kis6 brucella ab
20	31	81.6	391	N	Q9RPX5	
21	31	81.6	391	N	Q8FXK6	Q8fxk6 brucella su
22	31	81.6	554	N	Q6G1X9	Q6g1x9 bartonella
23	31	81.6	595	N	Q37901	Q37901 bacteriopha
24	31	81.6	798	N	Q6BV08	Q6bv08 debaryomyce
25	31	81.6	849	N	Q6DB45	Q6db45 erwinia car
26	31	81.6	1107	N	Q12271	Q12271 Baccharomyc
27	31	81.6	2646	N	Q6XHA6	Q6xha6 dictyosteli
28	30	78.9	111	N	Q811U6	Q811u6 mus musculu
29	30	78.9	138	щ	PSBR_HORVU	Q40070 hordeum vul
30	30	78.9	157	N	Q9M5E0	Q9m5e0 medicago sa
ω	30	78.9	170	N	Q8S3I1	Q883i1 medicago sa

ALIGNMENTS

07qt52 067740 087920 077882 09miv6 05miv6 07uem9 09etv8 09e924 08e744 078912 06e6i2 06e6i2 06e6i2 06e744 078912 079912 083bn5
092q3
086pq3
080pq1
070wu7
0971x67
070e66md6
070e850
07m9k3
013836
07m9k3
013836
07m9k3
089110
086106
086106 07xcs4
07sg9
020441
06r8b5
07rn95
07rn95
07rer
03qe9
09px0
09sgw0
09sgw0 actinoplane
pseudomonas
solanum tub
lacteroides
hirudo medi
drosophila erwinia car pectobacter giardia lam lymphocysti yersinia in plasmodium sulfolobus bdellovibri rhodopirell sequid herpe
d equid herpe
soryza sativ
coryza sativ
coryza sativ
coryza sativ
equid herpe
equid herpe
cowdria rum
clostridium O ureaplasma
O arabidopsis
O arabidopsis
4 bacteriopha
5 anopheles g
1 arabidopsis
5 thermoanaer streptococc streptococc melanoplus agrobacteri mycoplasma clostridium prochloroco hepatitis c lactobacill ustilago ma coxiella bu arabidopsis neurospora nosema locu sodalis glo prochloroco plasmodium prochloroco caenorhabdi desulfovibr saccharomyc listeria mo rhodopirell azotobacter homo sapien wolinella s sulfolobus cryptospori giardia lam neurospora caenorhabdi oryza sativ oryza schizosacch

밁

50

YSTSNLAS

```
QBK1F2
ID QBK1
QBK1
QBK1
QBK1
DT 01-Q

                                                                                                                                                                                                                                                                RESULT QRKIF1
ID
ON NO
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 8
                                                                                                                         Best
                                                                                        Matches
                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-BALB/c; TISSUE=Hyperimmunized spleen;
Zhou Y.-X., Taguchi H., Planque S., Karle S., Ni
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ da
EMBL; AF516283; AAM64201.1; -.
PIR; H33932; H33932.
HSSP; P01837; 25C8.
InterPro; IPR007110; Ig-like.
InterPro; IPR00756; Ig_v.
SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                             PIR; A33933; A33933.

PIR; PH1058; PH1058.

HSSP; P01837; 25C8.

InterPro; IPR007110; Ig-like.

InterPro; IPR003596; Ig_v.

SMART; SM00406; IGv; 1.
                                                                                                                                                                                                                                                                     NON TER
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhou Y.-X., Taguchi H., Plan
Submitted (MAY-2002) to the
EMBL; AF516284; AAM64202.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2002 (TrEMBLrel. 26, Last annotation update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Anti-VIPase light chain variable region (Fragment).
Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata;
Mammmalia; Eutheria; Rodentia; Sciurognathi; Muridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8K1F1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-2002 (TrEMBLrel. 22, Created)
01-OCT-2002 (TrEMBLrel. 22, Last sequence up
01-MAR-2004 (TrEMBLrel. 26, Last annotation
Anti-VIPase light chain variable region (Fra
Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=BALB/c; TISSUE=Hyperimmunized spleen; Zhou Y.-X., Taguchi H., Planque S., Karle S., Zhou Yi-X., Taguchi H., Planque S., Karle S., Zhou Y.-X., Taguchi H., Planque S., Karle S., Zhou Y.-X., Taguchi H., Planque S., Karle S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q8K1F2;
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8K1F2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q8K1F1;
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                    Similarity
8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       æ
~:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YSTSNLAS 8
                                                                                                                                                                                                                                                                                                                                                                                          PS50835; IG_LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YSTSNLAS 55
YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    112 AA;
                                                                                                                                                                                                                                                                     114 AA;
                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11953 MW;
                                                                                                                                                                                                                                                                     12162 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                              100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 38; D
Pred. No. 1;
                                                                                                                              Score 38; DB 2;
Pred. No. 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4716B87FADB543ED CRC64;
                                                                                                                                                                                                                                                                          8BD9833DBF3EEFD1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence update)
annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nishiyama
databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nishiyama Y., databases.
                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 112;
                                                                                                                                                                            Length 114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Paul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
RESULT
ORDITO
OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
Q9JL76
    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q811C3;
01-JUN-2003
01-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
NON TER
SEQUENCE
                    HSSP; P01679; 2FBJ.
InterPro; IPR007110; InterPro; IPR003596; INTERPRO; IRV03596; IGV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9JL76
Q9JL76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Takahashi S., Itoh J., Nose M., Ono M., Yamamoto T., Kyogoku M. "Cloning and CDMA sequence analysis of nephritogenic monoclonal antibodies derived from an MRL/lpr lupus mouse.";
Mol. Immunol. 30:177-182(1993).
EMBL; D14629; BAA03482.1; -.
HSSP; P01679; 2FBJ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Imunoglobulin gamma-3 kappa
Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2003 (TrEMBLrel. 24, 01-JUN-2003 (TrEMBLrel. 24, 01-MAR-2004 (TrEMBLrel. 26,
                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (Mouse)
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN=MRL/MpJ-lpr/lpr; TISSUE=Spleen;
MEDLINE=93156722; PubMed=8429833; DOI=10.1016/0161-5890(93)90089-T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q811C3
                                                                                                                                                                                               MEDIINE=20448942; PubMed=10992488; DOI=10.1128/TAI.68.10.5803-5808.2000; Malkiel S., Liao L., Cunningham M.W., "T-Cell-dependent antibody response to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
                                                                                                         EMBL; AF206030; AAF69328.1;
                                                                                                                                                  with cardiac myosin.";
                                                                                                                                                                      streptococcal polysaccharide,
                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-myosin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE;
                                                                                                                                  Infect.
                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                         (Fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (nterPro; IPR007110;
(nterPro; IPR003596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SM00406;
                                                                                                                                Immun. 68:5803-5808(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS50835; IG_LIKE; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YSTSNLAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23 >
131
131 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 15, Created)
(TrEMBLrel. 15, Last sequence update)
(TrEMBLrel. 25, Last annotation update)
immunoglobulin light chain variable reg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IGV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22
>131
131
14083 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           œ
IG_LIKE;
                                                                                                                                                                                                                                                                                                                                                                       Chordata;
Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ig-like.
Ig_v.
                                      ig_v.
                                                                 Ig-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MW;
                                                                                                                                                                                                 response to the dominant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Created)

Last sequence update)

Last annotation update
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chain precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 38;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 immunoglobulin gamma-3 kappa chain.
                                                                                                                                                                          N-acetyl-glucosamine,
                                                                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5E83656954666E9E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131
                                                                                                                                                                                                                       Diamond B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          update)
(Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                             region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                             ٦.
و
                                                                                                                                                                                                 epitope of
                                                                                                                                                                                                                                                                                                                                                                          Murinae; Mus
                                                                                                                                                                          cross-reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                           Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 on:
     Pred. No. is th score greater t and is derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              score:
                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ı
     읁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A_Geneseq_16Dec04:*
1: geneseqp1990s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2003s:*
6: geneseqp2033s:*
7: geneseqp2003bs:*
8: geneseqp2004s:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-018-245A-6
52
1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                           Query
Match
1000.0
1000.0
802.7
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2105692 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 March
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13:01:25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                           the number of results predicted by chance to have a r than or equal to the score of the result being printed, ed by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24, 2005, 08:54:17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000000000
 GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               386760381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2005
  AAG80316
AAG80318
AAB88442
AAB88442
AAD31869
AAD31868
AAD31867
AAD3187
AAD3187
AAD3187
AAD31881
AAD31881
AAD31881
AAD31881
AAD31881
AAB53733
AAE03733
AAE03733
AAE03733
AAE03733
AAE03732
AAE03732
AAE03733
AAE03732
AAE037
                                                                                                                                                                                                                                                                                                                                                           Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search time 68.3438 Seconds (without alignments) 50.931 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2105692
  Aag80316
Aag80318
Aab88442
Adq31869
Adq31868
Adq31868
Adq31867
Adq3187
Adq3187
Adq31881
Aae03732
                                                                                                                                                                                                                                                                                                                                                           Description
  Anti-huma
Anti-huma
Humanised
Humani
```

35	70	836	200	115	368	996	178	02	723	34	312	61	381 881	49	30	84	184 030	149	371 030	200	335	67	339	742 521	106	332	763	331	332 521	991	741	332 763	742	66	300	AAM81216 AAG65963	320)12	319	145	237 754	230	754	48	13	199
m8035	h5970	h5968	d0526	m3115	h5968	h5966	2478	602	723 828	934	069 312	161	484 381	449	030	484	484 030	449	371 030	002	235	567	539	742 521	106	832 763	763	931	832 521	466	، در د	832 763	742	166	990	œΞ	6820	12	8650 6819	2145	237	2230	9754	4648	n2213	Adg22610 Adn24892
Murine ho	4 VK	₽ #	ale	eptide	ght	ight c	tK ant	ente .	Cytomegal Plasmodin	NA vir	tein IIK48	. µ. ˈ	an	abidop	Arabidops	abidop	Arabidops Arabidops	abidop	man ar abidor	. pylor	acteria	teria	cteria	an he arana	# :	בי בי	Human hep	g	ane	a.	vel	Human hep	Human hep		Human exc	Human hae Human hep	ylB z		sperg ylB r	acter	hlamy rtifi	RF2 pr	rtifi V(GD-	5 VK	acteria	100

```
RESULT 2
AAG80318
ID AAG8
XX
AC AAG8
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TWF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TWF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TWF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factor-humans. This sequence represents the anti-human tumour necrosis factor-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
      AAG80318;
                                                            AAG80318 standard; protein; 108 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAG80316 standard; peptide; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 9 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot immunogenicity treatment of TNF-related diseases such as toxic shoot shoot shoot should be a shoot shoot should be a shoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-066345/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-APR-2000; 2000JP-00117394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAG80316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3c; Page 27; 36pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fukuda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                                                                                                        Similarity 100 9; Conservative
                                                                                                                                                                                                                                                                  HQYLRSPYT 9
                                                                                                                                                                                                              HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TNF-alpha CDR-L3 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     65.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nakanishi T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ထထ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADH59678
ADH59710
                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                       Score 52; DB 5; Pred. No. 1.8e+06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                  Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Adh59678
Adh59710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    toxic shock
                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hPAM4
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     숲矣
                                                                                                                                                                                                                                                                                                                              0
   RESULT 3
AAB8442
ID AAB8442
XX AAB8
AC AAB8
XX AAB8
XX BABB
XX BABB
XX BABB
XX BABB
XX BABB
XX BABB
AC AAB8
AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 28-29; 36pp; Japanese.
      EP1067182-A2
                                                                                                                                                                                                                                                                     23-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90 HOYLRSPYT 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \vdash
```

```
TNF-alpha; tumour necrosis factor-alpha; antibody; anti-human; CDR; heavy chain; light chain; complementarity determining region; vasotropic; antiarthritic; neuroprotective; protozoacide; toxic shock syndrome; rheumatoid arthritis; malaria; multiple sclerosis.
Novel heavy and light-chain polypeptides of chimeric and humanized antibodies against human tumor necrosis factor alpha for low-immunogenicity treatment of TNF-related diseases such as toxic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                           18-APR-2001; 2001WO-JP003308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-2002
                                                                                                                                         N-PSDB; AAI69376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200179298-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anti-human TNF-alpha L chain CDR region encoding DNA
                                                                                                                                                                            WPI; 2002-066345/09.
                                                                                                                                                                                                                                                                                                                                                                               19-APR-2000; 2000JP-00117394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-OCT-2001
                                                                                                                                                                                                                                                                                                               (SUNR ) SUNTORY LTD
                                                                                                                                                                                                                                            Nagahira K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                            Nakanishi T;
```

or their fragments of a recombinant antibody to human TNF-alpha which contain complementarity determining region (CDR) sequences. The products of the invention have vasotropic, antiarthritic, neuroprotective and protozoacide activity. The antibodies act by neutralising TNF-alpha in vivo. The antibodies are used for producing chimeric and humanised antibodies that may be used for the treatment and prevention of TNF-alpha associated diseases such as toxic shock syndrome, rheumatoid arthritis, malaria and multiple sclerosis. The antibodies have low immunogenicity in humans. This sequence represents the anti-human tumour necrosis factoralpha (TNF-alpha) light chain CDR fragment described in the invention Sequence 108 AA; This invention describes novel heavy chain and light chain polypeptides or their fragments of a recombinant antibody to human TNF-alpha which

Local Similarity hes 9; Conserv HOYLRSPYT 9 Conservative 100.0%; Score 52; DB 5; 100.0%; Pred. No. 0.099; 0 Mismatches 0 Length 108; Indels 0 Gaps

0

```
AAB88442 standard; protein; 170 AA
```

Human membrane ç secretory protein clone PSEC0224.

(first entry)

Human; secretory protein; membrane protein; vaccine; gene therapy; rheumatoid arthritis; diabetes.

Homo sapiens

24 13:01:26

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                     Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cotal number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              :10
     Pred. 1
score g
and is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB BB
                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                 No. is t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ō,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                      derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                     %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-018-245A-6
52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 March 24, 2005, 08:57:11; Search time 18.1406 Seconds (without alignments) 37.035 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                     Length
    GenCore
(c) 1993
                                                                                                                                                                                                                                                                                                                                                                      ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapext
     US-09-489-039A-8134
US-08-353-485-10
US-08-353-485-10
US-09-066-330-11
US-09-066-330-11
US-09-270-767-49894
US-09-270-767-49894
US-09-248-796A-23592
US-09-134-001C-3651
US-09-134-001C-3651
US-09-134-001C-3651
US-09-137-755-17
US-09-157-7951
US-09-157-7951
US-09-157-7951
US-09-18-452A-578
US-09-48-178
US-09-48-178
US-09-48-185A-541
US-09-48-185A-541
US-09-48-185A-541
US-09-48-7841
US-09-48-7841
US-09-540-236-3720
US-09-710-279-1874-1795
US-09-710-279-1874-1795
US-09-248-796A-21795
US-09-248-796A-21795
US-09-248-796A-21795
US-09-248-796A-21795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           version 5.1.6 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                   8-681-432-1
8-230-843-2
8-636-936-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ltd
                                                                                                                                                                                                                                                                                                                                                                     Description
  Sequence
 34677, A
43877, A
23592, A
2378, Ap
2378, Ap
277, Appl
17, Appl
1874, Appl
1874, Appl
1875, Appl
1875, Appl
1875, Appl
27, Appl
1875, Appl
27, Appl
                                                                                                                                                                                               10, Appl
10, Appl
11, Appl
34677, A
49894, A
23592, A
2378, Ap
3651, Ap
                                                                                                                                                                                                                                                                                                    1, Appli
2, Appli
2, Appli
2, Appli
8134, Ap
      ω.
×
ω. ω ω ω ω ω ω ω ω ω ω α ω ω ω
ω π ω ω ω ω ω ω ω ω ω ω ω ω ω ω
      738
922
1335
3472
3477
128
128
128
128
139
146
     US-09-690-454-112
US-09-713-400-15-6
US-09-972-540-15-6
US-09-173-300-36
US-09-173-300-36
US-10-027-450-3
US-09-173-300-38
US-09-173-300-38
US-09-173-300-38
US-09-173-300-38
US-09-173-300-38
US-09-173-300-38
US-09-173-301-3716
US-09-252-3188-10
US-09-345-2388-10
US-09-472-087-16
US-09-480-76A-16
US-09-480-76A-16
US-09-490-153-16
US-09-490-070A-16
US-09-49
                sequence
seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
    112, Appli 16, A
```

```
ALIGNMENTS
```

```
RESULT 2
US-08-230-843-2
                                                                                                       밁
                                                                                                                                                                                                                            US-08-681-432-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-681-432-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
            Sequence 2, Application US/08230843 Patent No. 5582826
                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08681432 Patent No. 5800991
                                                                                                                                                                Matches
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                             TELEPHONE: (703) 836-6620
TELEFAX: (703) 836-2021
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: 1
TITLE OF INVENTION: 1
TITLE OF INVENTION: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/681,432
FILING DATE: 23-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA;
APPLICATION NUMBER: US 00
FILING DATE: 11-MAR-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                      TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                         NAME: Teskin, Robin L.
REGISTRATION NUMBER: 35,030
REFERENCE/DOCKET NUMBER: 02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
                                                                                                                                                                                                                                                                                                   ENGTH:
                                                                                                     90 HOYHRSPLT 98
                                                                                                                                 1 HOYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RY: United States 22313-1404
                                                                                                                                                                                                                                                                                  amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P.O. Box 1404
                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HALEY, Boyd E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BURN, DOANE, SWECKER & MATHIS
                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                        peptide
                                                                                                                                                                                                                                                                  single
                                                                                                                                                                              71.2%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 08/208,822
                                                                                                                                                                <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                         028750-132
                                                                                                                                                                            Score 37; DB 1; Length 231; Pred. No. 22;
                                                                                                                                                                Mismatches
                                                                                                                                                                2; Indels
                                                                                                                                                                0
                                                                                                                                                              Gaps
```

APPLICANT:

APPLICANT:

APPLICANT:

NAKAZAWA, HARUMI KANAYAMA, YUKA

SHIMAMURA, TOSHIRO HAMURO, JUNJI

0

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                            Ş

// MOLECULE TYPE: protein
US-08-230-843-2
                                                                                                                                                                                                                                                                                                                             US-08-636-936-2
                                                                                                                                                                                                                                                                                                                                              RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 248855 OPAT UNINFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 244 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRILING DATE: 21-APR-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 036065/19
PRILING DATE: 07-MAR-1994
ATTORNEY AGENT INFORMATION:
NAME: Oblon, No. 5582826man F.
REGISTRATION NUMBER: 24,618
                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: OCTELECOMMUNICATION INFORMATION:
                                                                                                                                                            APPLICANT: TAKESHI'
                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: TAKESHITA, TOSHIKAZU
TITLE OF INVENTION: IMMUNOSUPPRESSANT
                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                             APPLICANT:
COMPUTER READABLE FORM:
                                          STREET: 1755 S. CITY: Arlington STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 1755 S. CITY: Arlington STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
les 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (703) 413-30
TELEFAX: (703) 413-2220
TELEX: 248855 OPAT UR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: JP 094491/1993 FILING DATE: 21-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 21 CLASSIFICATION:
               COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                            ADDRESSEE:
                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                               91 HQYHRSPLT 99
                                                                                                                                                                                                                                                                                                                                                                                                                              1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                5856140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                                                                                                                             Application US/08636936
                                                                                                                                                                                         HAMURO, JUNJI
NAKAZAWA, HARUMI
KANAYAMA, YUKA
SUGAMURA, KAZUO
                                                                            1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1755 S. Jefferson Davis Highway, Suite 400
                            U.S.A.
                                                                                                                                                                                                                                                             SHIMAMURA, TOSHIRO
                                                                                                                                                            TAKESHITA, TOSHIKAZU
FENTION: IMMUNOSUPPRESSANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                           OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (703) 413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71.2%;
77.8%;
                                                                                                                                             12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/230,843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP 036065/1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0010-0674-0X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 37; DE
Pred. No. 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 244;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
```

24

13:01:26

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM protein - protein search, using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
      Pred. No. is the number of results predicted score greater than or equal to the score of t and is derived by analysis of the total score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
BG
                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
      of hits satisfying chosen parameters:
                                                                                                                                                                                                                  %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-018-245A-6
52
1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          March 24, 2005, 08:56:15; Search time 51.8906 Seconds (without alignments) 57.427 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                         1407402 seqs, 331100923 residues
                 1008
008
008
008
008
008
                                                                                                                                                                                                                                                                                                                                               : /cgn2 6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
: /cgn2 6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Published_Applications_AA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copyright
                                   Length
GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapext
 US-10-018-245A-6
US-10-818-068-7
US-10-818-068-8
US-10-818-068-9
US-10-818-068-10
US-10-818-068-11
US-10-818-068-12
US-10-724-274-7
US-10-724-274-9
US-10-724-274-10
US-10-724-274-10
US-10-724-274-10
                                                                                                                                                                                                                   IJ
                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mode1
                                                                                                                                                                                                                                                                                            predicted by chance to have a score of the result being printed, total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1407402
                                                                                                                                                                                                                  Description
   Sequence
6, Appli
8, Appli
9, Appli
9, Appli
10, Appli
11, Appli
12, Appli
13, Appli
14, Appli
15, Appli
16, Appli
17, Appli
18, Appli
19, Appli
11, Appli
11, Appli
      \begin{array}{c} \textbf{5.5.5} \\ \textbf{5.
                                                                                                                                                                                                                                6 US-10-818-068-18
US-10-1818-068-18
US-10-1818-068-22
US-10-124-274-18
US-10-10-818-068-26
US-10-10-818-068-26
US-10-10-818-068-26
US-10-10-818-198-29
US-10-10-1818-198-29
US-10-10-1818-29
US-10-10-1818-29
US-10-10-1818-29
US-10-10-1818-29
US-10-19-1818-29
US-10-19-18-29
US-10-18-29-18-29
US-10-18-29-29
US-10-18-
 Sequence 18, Appl
Sequence 22, Appl
Sequence 26, Appl
Sequence 26, Appl
Sequence 27, Appl
Sequence 290, App
Sequence 181354,
Sequence 181354,
Sequence 181355, Ap
Sequence 290, App
Sequence 290, App
Sequence 17545, Ap
Sequence 290, App
Sequence 1700, App
Sequence 1700, App
Sequence 1700, App
Sequence 1700, App
Sequence 187006,
Sequence 187006,
Sequence 11538, Appl
Sequence 11538, Appl
Sequence 1580, Ap
Sequence 17, Appl
Sequence 17, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 13, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 1580, Ap
Sequence 11, Appl
Sequence 11, Appl
Sequence 11, Appl
Sequence 12, Appl
Sequence 13, Appl
Sequence 14, Appl
Sequence 14, Appl
Sequence 1580, Ap
Sequence 17, Appl
Sequence 17, Appl
Sequence 18622, A
Sequence 18622, A
Sequence 19, Appl
Sequence 17, Appl
Sequence 18621, Appl
Sequence 17, Appl
Sequence 18186, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 18186, Appl
Sequence 17, Appl
Sequence 17, Appl
Sequence 18186, Appl
Sequence
```

THE

```
US-10-818-068-7
                                                                                                                                                                                                                                                                              RESULT 2
US-10-818-068-7
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: CDR-L3 of anti-human TNF-alpha antibody US-10-018-245A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-018-245A-6
                                                                                                                                  Sequence 7, Application US/10818068
Publication No. US20050002930A1
GENERAL INFORMATION:
APPLICANT: Protein Design Labs
TITLE OF INVENTION: METHODS OF PRODUCTION AND USE OF ANTI-INTEGRIN ANTIBODIES FOR THE
TITLE OF INVENTION: CONTROL OF TISSUE GRANULATION
FILE REFERENCE: 05882.0186.NPUS01
CURRENT APPLICATION NUMBER: US/10/818,068
CURRENT FILING DATE: 2004-04-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: JP 117394/2000
PRIOR FILING DATE: 2000-04-19
NUMBER OF SEQ ID NOS: 19
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: FUKUDA, Yoshiaki
APPLICANT: NAKANIRA, Kazuhiro
APPLICANT: NAKANISHI, Toshihiro
APPLICANT: NAKANISHI, Toshihiro
TITLE OF INVENTION: Novel recombinant antibody, amino acid sequences of its complemen
TITLE OF INVENTION: determining regions and genes encoding the same
FILE REFERENCE: 46224
 Query Match
                                                                                          SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/10018245A Publication No. US20040115196A1
                                                                                          NUMBER OF SEQ ID NOS: 41
SOPTWARE: PatentIn version 3.2
EQ ID NO 7
                                             LENGTH: 109
TYPE: PRT
ORGANISM: Homo :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 9
TYPE: PRT
ORGANISM: mouse
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/018,245A CURRENT FILING DATE: 2002-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
92
93
94
94
94
96
98
                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity nes 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                         1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                             Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     854
1087
1564
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
812
838
                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 52; DB 16; 100.0%; Pred. No. 1.3e+06; tive 0; Mismatches 0;
 80.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-289-762-578
US-10-104-047-2027
US-10-141-849-7233
US-10-170-385-59
US-10-369-493-6801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-801-368-244
US-10-369-493-22424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-746-783-82
US-10-437-963-202845
US-10-408-765A-2364
US-10-408-765A-113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-861-294-10
US-09-924-099-5
 Score 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
 BB
16;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 59, Appl
Sequence 6801, Ap
Sequence 244, App
Sequence 22424, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 82, Appl
Sequence 202845,
Sequence 2364, Ap
Sequence 113, App
Sequence 578, App
Sequence 2027, Ap
Sequence 7233, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 10, Appl
Sequence 5, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10,
                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                      밁
                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                       RESULT 5
US-10-818-068-10
                                                                                                                                                                                                                                                                                              US-10-818-068-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-10-818-068-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-818-068-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-818-068-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 88. Matches 8; Conservative
                                                                                                                                                                                                                            Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 109
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                        LENGTH: 109
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity les 8; Conserv
                                                                                                                                                                      90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90
                                                                                                                                                                                       1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HOYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 HQYLRSPYT 9
                                                                                                                                                                    HQYLRSPPT 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOYLRSPPT 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HQYLRSPPT 98
                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                80.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           88.9%;
```

```
CURRENT APPLICATION NUMBER: US/10/818,068
CURRENT FILING DATE: 2004-04-02
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn version 3.2
SEQ ID NO 9
Sequence 10, Application US/10818068
Publication No. US20050002930A1
GENERAL INFORMATION:
APPLICANT: Protein Design Labs
TITLE OF INVENTION: METHODS OF PRODUCTION AND USE OF ANTI-INTEGRIN ANTIBODIES FOR
TITLE OF INVENTION: CONTROL OF TISSUE GRANULATION
FILE REFERENCE: 05882.0186.NPUS01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9, Application US/10818068 Publication No. US20050002930A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Protein Design Labs
TITLE OF INVENTION: METHODS OF PRODUCTION AND USE OF ANTI-INTEGRIN ANTIBODIES:
TITLE OF INVENTION: CONTROL OF TISSUE GRANULATION
FILE REFERENCE: 05882.0186.NPUS01
CURRENT APPLICATION NUMBER: US/10/818,068
CURRENT FILING DATE: 2004-04-02
NUMBER OF SEQ ID NOS: 41
SOFTWARE: Patentin version 3.2
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 8, Application US/10818068 Publication No. US20050002930A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Protein Design Labs
TITLE OF INVENTION: METHODS OF PRODUCTION AND USE OF ANTI-INTEGRIN ANTIBODIES FOR
TITLE OF INVENTION: CONTROL OF TISSUE GRANULATION
FILE REFERENCE: 05882.0186.NPUS01
                                                                                                                                                                                                                                                                                                                                                                      Score 42; I
Pred. No. 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 42;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 4.2;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
1.2;
                                                                                                                                                                                                                                                                                                                                                                                            DB 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16;
                                                                                                                                                                                                                                                                                                                                                                                            Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FOR
```

THE

THE

major capsid prote

OM protein - protein search, using sw model Run on: March 24, 2005, 08:54:17; Search time 12.6562 Seconds (without alignments) 68.421 Million cell updates/sec Copyright GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.

Title: Perfect score: Sequence: US-10-018-245A-6 52 HQYLRSPYT 9

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

283416 seqs, 96216763 residues

Searched:

Total number of hits satisfying chosen parameters: 283416

Minimum DB Maximum DB seq length: 0
seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 100 summaries

Database

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

ţ	S O	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	₅	44	ω	2	–	Result
	24	34	34	34	34	34	34	35	35	35	35	35	35	35	35	36	36	36	36	36	36	36	36	36.5	37	37	37	37		Score
	Α Α Α	5	65.4	65.4	65.4	65.4	65.4	67.3	67.3	67.3	67.3	67.3		67.3	•	9.	9.	9.	9.	9.	9	69.2	9.	70.2	۲	71.2	71.2	71.2	73.1	% Query Match
	2	1069	1014	947	947	332	271	1732	899	818	663	586	486	486	345	936	931	778	778	480	363	322	99	388	673	418	132	99	309	Length
t	s	N	N	N	N	Ŋ	N	N	N	N	N	N	N	2	N	Ŋ	N	N	N	N	N	N	N	ب	N	N	N	N	N	DB
	T16876	D85383	T31433	D72067	G86557	T19457	JQ0950	T30836	C71608	F82173	T40493	JC6500	B64532	A71975	T09115	E86222	D86222	AI3064	G98221	JC7506	C69828	T32263	PH1058	S49052	JQ1744	D71460	S46373	PH1059	S61665	ı
		othetica		polymorphic membra	7	hypothetical prote	ICP 18.5 protein -	ř	origin recognition	nase VC1	3/forkhead	hnf-3/forkhead tra	threonine synthase	threonine synthase	æ		protein F7G19.9 [i	glucose dehydrogen	glucose dehydrogen	heparanase protein	conserved hypothet	hypothetical prote	Ig light chain V r	Œ	hypothetical 77.2K	probable membrane		Ig light chain V r		cription

1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	- X C C C C C C C C C C C C C C C C C C
11088888888888888888888888888888888888	
0 + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	+ a a a a a a a a a a a a a a a a a a a
T36276 T3	-33-73-73-73-73-73-73-73-73-73-73-73-73-

hypothetical prote Cu metalloregulato probable dolichyltransport of dicar C4-dicarboxylate a c4-dicarboxylate a dcuC protein - Esc hypothetical prote amidophosphoribosy DNA repair helicas fibroin-3 related hypothetical prote related to pathway autolysin E - Stap DNA-directed RNA phypothetical prote hypothetical prote Ig kappa chain V-I hypothetical prote prophenate dehydra and prote lipase (lipp-1) [intype II DNA modification action of the protein hypothetical protein hypothetical protein spring probable membrane-hypothetical protein hypothetical protein hypothetical protein probable membrane-hypothetical protein hypothetical hypothetical protein hypothetical protein hypothetical protein hypothetical protein hypothetical protein hypothetical protein hyp probable transport compone Ig light chain V r Ig kappa chain V r Ig kappa chain V r Ig kappa chain V r Ig light chain V r Ig protection R03A10.6 [hypothetical prote hypothetical prote dwe protein - frui inner layer protei inner layer protei vPl protein - porc hypothetical prote DNA binding protei hypothetical protein - march hypothetical prote hypothetical prote conserved hypothet hypothet conserved hypothet hypothetical prote calpain (EC 3.4.22 squamosa promoter squamosa-promoter probable periplasm

ALIGNMENTS

C;Species: Saccharomyces cerevisiae C;Date: 09-Mar-1996 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004 C;Accession: S61665; S66992 R;Benes, V.; Andrade, M.A.; Rechmann, S.; Teodoru, C.; Banrevi, A.; Sander, C.; Valencis submitted to the EMBL Data Library, December 1995 A;Description: Nucleotide sequence and analysis of a 130 kb fragment of yeast chromosome R;Tillman, D.M.; Jou, N.T.; Hill, R.J.; Marion, T.N. J. Exp. Med. 176, 761-779, 1992 A;Tille: Both 19M and 19G anti-DNA antibodies are the products A;Reference number: PH0971; MUID:92381444; PMID:1512540 A;Map position: 15R C;Superfamily: Saccharomyces cerevisiae probable membrane protein C;Keywords: transmembrane protein F;129-145/Domain: transmembrane #status predicted <TMM> A;Residues: 1-309 <BEN> A;Residues: 1-309 <BEN> A;Cross-references: UNIPROT:Q99188; EMBL:X94335; NID:g1262139; PID:e217829; PID:g1164952 A;Voss, H., Benes, V.; Rechmann, S.; Teodoru, C.; Schwager, C.; Paces, V.; Ansorge, W. submitted to the Protein Sequence Database, July 1996 뭥 Ś Ś A; Molecule type: DNA A; Residues: 1-309 < V A; Molecule type: DNA A; Residues: 1-309 <B probable membrane protein YOR107w - yeast (Saccharomyces cerevisiae) N;Alternate names: hypothetical protein O3224; hypothetical protein YOR3224w A; Molecule type: mRNA A;Status: nucleic acid sequence not shown A; Accession: PH1059 Ig light chain V region (clone 17s-c1) - mouse (fragment) c;Species: Mus musculus (house mouse) C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change C;Accession: PH1059 밁 A; Cross-references: SGD: S0005633 A;Gene: SGD:RGS2 A; Accession: S66992 A; Reference number: S66965 A;Accession: S61665 A; Reference number: S61643 ;Residues: 1-309 <VOS> ;Residues: 1-309 <VOS> ;Cross-references: EMBL:Z75015; NID:g1420290; PID:e252009; PID:g1420291; MIPS:YOR107w ;Experimental source: strain S288C 16-91/Domain: immunoglobulin homology <IMM> Superfamily: immunoglobulin V region; Keywords: immunoglobulin Experimental source: B cell, Query Match Best Local Matches Query Match Residues: 1-99 <TIL> Local Similarity tes 7; Conserv Local Similarity 90 39 <u>ه</u> HQYLRSPYT 9 HQYHRSPLT 98 HQYLRSPYT 9 Conservative Conservative 47 71.2%; 77.8%; 73.1%; strain [NZB x NZW]F1 <u>,</u> 2; Score 38; DB: Pred. No. 8.9; Score 37; DB Pred. No. 4.1; Mismatches Mismatches immunoglobulin homology DB 2; 2 1; 2; Length 309 Length 99; Indels ٥f 21-Jan-2000 0 0 clonally selective YOR107w Gaps Gaps 0; 0 w

RESULT 3 S46373

Matches

Conservative

Mismatches

1;

Indels

0

Gaps

0

```
RESULT 4
D71460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ig kappa chain V-J region (T24-9) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 27-Jan-1995 #sequence revision 01-Sep-1995 #text_change 21-Jan-2000
C;Accession: S46373; S36647
R;Bensimon, C; Chastagmer, P.; Zouali, M.
EMBO J. 13, 2951-2962, 1994
EMBO J. 13, 2951-2962, 1994
                                                                                                                                              C;Accession: JQ1744

R;Massung, R.F.; McFadden, G.; Moyer, R.W.
J. Gen. Virol. 73, 2903-2911, 1992

A;Title: Nucleotide sequence analysis of a A;Reference number: JQ1741; MUID:93057362; A;Accession: JQ1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: EMBL:Z27174; NID:g415963; PIDN:CAA81698.1; PID:g415964
C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Human lupus anti-DNA autoantibodies undergo essentially primary V(chi) gene real A;Reference number: S46369; MUID:94313975; PMID:8039491 A;Accession: S46373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Science 282, 754-759, 1998
A;Title: Genome sequence of an obligate intracellular pathogen of humans: Chlamydia track
A;Reference number: A71570; MUID:99000809; PMID:9784136
                                                                                                                                                                                                                                                             hypothetical 77.2K protein - rabbit fib
N;Alternate names: HJR protein
C;Species: rabbit fibroma virus, Shope
C;Date: 30-Sep-1993 #sequence_revision
C;Accession: TQ1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:O84876; GB:AE001360; GB:AE001273; NID:g3329342; PIDN:AAC68466
A;Experimental source: serotype D, strain UW-3/Cx
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            probable membrane thiol proteinase - Chlamydia trachomatis (serotype D, strain UW3/Cx)
C;Species: Chlamydia trachomatis
C;Date: 13-Sep-1998 #sequence_revision 13-Sep-1998 #text_change 09-Jul-2004
C;Accession: D71460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           F;34-114/Domain: immunoglobulin homology <IMM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
                                                                                        A; Cross-references: UNIPROT: Q9Q8T5
                                                                                                           A;Molecule type: DNA
A;Residues: 1-673 <MAS>
                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Gene: CT868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Residues: 1-418 <ARN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: D71460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Residues:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stephens, R.S.; Kalman, S.; Lammel, C.J.; Fan, J.; Marathe, R.; Aravind,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71.2%;
Local Similarity 66.7%;
les 6; Conservative
Local Similarity hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity hes 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 HQYLRSPYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1-132 <BEN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HQYLRSPYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOYYSSPFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HWYLRDPFT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71.2%;
                    75.0%;
                                                                                                                                                                                                                                                                                                                                                             rabbit fibroma virus
                  Score 37; DB
Pred. No. 33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 37; DB
Pred. No. 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 37; DB
Pred. No. 5.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                       fibroma virus
30-Sep-1993 #text_change 09-Jul-2004
                                                                                                                                                                              unique near-terminal PMID:1331293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 418;
                                            Length 673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                     region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                     of the tumorigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mitchell,
```

문

á

밁

S

Lpn

Mar

24 13:01:26

2005

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Title:
Perfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
           Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being put and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq length: 0
seq length: 2000000000
             protein search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               %
Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-018-245A-6
52
1 HQYLRSPYT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1612378 seqs, 512079187 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             March
                             882.7
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
880.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
800.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24, 2005, 08:54:17; Search time 59.3438 Seconds (without alignments) 77.661 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chosen parameters:
                       Q9RJŪ8
Q81JF7
Q81JF7
Q81JF7
Q81JF7
Q81JF6
Q69LW6
Q64JF6
Q6AU76
Q6AU71
Q92GH1
Q92GH2
Q6CH21
Q6CH21
Q6CH27
Q9Q8T5
Q6CH2F6
Q9Q8T6
Q8CUPF
Q9Q8T6
Q8CUPF
Q9Q8T6
Q8CUPF
Q9Q8T6
Q8CUPF
Q9Q8T6
Q8CUPF
Q6CSLB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRDL MOUSE
Q76LD0
NPD LACPL
Q7JP81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q8N2E2
Q7MEI0
Q6NXY0
                                                                                                                                                                                                                                                                                                                                                     Q7VGU4
Q99188
RT09_C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUMMARIES
                                                                                                                                                                                                                                                                                                                                                       CANAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mode1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ltd
 Q8n2e2 homo sapien Q8n2e2 homo sapien Q7mei0 vibrio vuln Q6nxy0 mus musculu Q920c1 caenorhabdi Q7jp80 caenorhabdi Q7jp80 caenorhabdi Q92499 plasmid col Q92499 plasmid col Q92499 plasmid col Q94150 candida alb Q91juB saccharomyce Q81if7 plasmodium Q89lw6 cnyva sativ Q64180 cryva sativ Q91gh1 oryva sativ Q91gh1 oryva sativ Q91gh1 oryva sativ Q91gh2 streptomyce Q8rur0 oryva sativ Q91gh1 yarrowia li Q6ch21 yarrowia li Q6ch27 yarrowia li Q6ch18 yarrowia li Q6ch19 oryva sativ Q94865 myxoma viru Q6ch18 parrowia ali Q6ch19 oryva sativ Q9466 myxoma viru Q6ch180 neurospora sativ Q6ch19 oryva sativ Q6ch180 neurospora
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1612378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ρ
                                                                                 36
                                                                                   QUO CORRECCIO CO
                                                                                 \begin{array}{c} 480 \\ 480 \\ 5514 \\ 480 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 \\ 552 
                                                                               08WWQ2
09HB37
08CYS1
08CYST
08CYS1
08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q9SI68
Q54142
O17066
O17544
Q9HB39
Y330 SI
Q8GW03
Q9HB38
                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SHEON
                                                                               0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816.20
0.9816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 bordetella
7 cicindela c
7 cicindela c
6 cicindela c
5 cicindela m
1 cicindela b
1 cicindela m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           o vibrio chol
helicobasid
bacteroides
rhizobium l
rhizobium l
rhizobium l
rhizobium e
schizosacch
vibrio para
l plasmodium
vibrio chol
plasmodium
plasmodium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5 arabidopsis
6 arabidopsis
6 alstroemeri
6 alstroemeri
7 caenorhabdi
2 oryza sativ
7 arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 homo sapien
2 homo sapien
7 homo sapien
1 oryza sativ
7 agrobacteri
                                                                                                                                                                                                                                                                                                                                                                                           pentacomia
cicindela u
cicindela c
cicindela d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         porphyromon
caenorhabdi
alstroemeri
                                                                                                                     cicindela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               porphyromon
porphyromon
porphyromon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     shewanella
oryza sativ
homo sapien
                                                                                 cicindela
cicindela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             helicobacte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 arabidopsis
vibrio chol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             arabidopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 helicobacte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         streptomyce
caenorhabdi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bacillus
```

0 x a t < 0 t b D 0 D F t b D D D C t

3 43 0 0 4

```
QBNZEZ 1
QBNZEZ ID QBNZEZ ID QBNZEZ ID 01-0
DT 10-0
DT 01-0
DT 10-0
DT
                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                            Q6NXY0
                                                               RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                 Query Match
Best Local 9
                                                                                                                                                                                                                                Matches
Q6NXY0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q8N2E2;
Q8N2E2;
01-OCT-2002
01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Complete
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen C.-Y., Mu K.-M., Chang Y.-C., Chang C.-H., Tsai H.-C., Liao T.-L., Liu Y.-M., Chen H.-J., Shen A.B.-T., Li J.-C., Shao C.-P., Lee C.-T., Hor L.-I., Tsai S.-F.; "Comparative genome analysis of Vibrio vulnificus, a marine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2004 (TrEMBLrel. 26, Created)
01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical protein PSEC0224.
Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. PubMed=14656965; D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7MEIO;
01-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q7MEI0
                                                                                                                                                                                                                                                                                                                                                                InterPro; IPR002789; DUF87. Pfam; PF01935; DUF87; 1.
                                                                                                                                                                                                                                                                                                                                                                                                             Genome Res. 13:2577-2587(2003).
EMBL; AP005347; BAC96716.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria; Proteobacteria; Gammaproteobacteria; Vibrionales; Vibrionaceae; Vibrio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OrderedLocusNames=VVA0690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hypothetical protein VVA0690.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=196600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vibrio vulnificus (strain YJ016).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28
                                                                                                                                                                                                                              Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 7; Conserv
                                                                                                                                      HOYLRDPY 447
                                                                                                                                                                                                                                                                                                                 proteome; Hypothetical
565 AA; 62426 MW; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HQYLRSPY 8
                                                                                                                                                                                   HQYLRSPY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HQFLRSPY 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (TrEMBLrel. 22, Created)
(TrEMBLrel. 22, Last sequence update)
(TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DOI=10.1101/gr.1295503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18999 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82.7%;
87.5%;
                                                                                                                                                                                                                                                 82.7%;
87.5%;
                                                                                                                                                                                                                              <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 43;
Pred. No.
                                                                                                                                                                                                                                                   Score 43; DB 2;
Pred. No. 8.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38EF957175E50D73
                                                                                                                                                                                                                                                                                                                   478F1601A7F1E98E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43; DB 2;
No. 2.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           565 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 170;
                                                                                                                                                                                                                                                                      Length 565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hayashi K.,
Nakamura Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRC64;
                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ระ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ishii S.,
                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T.-L.,
                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                            0
```

```
RESULT 4
CRDL_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOR REPORTED TO THE PROPERTY OF THE PROPERTY O
        RRRR OOC OG DET DAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RX MEDLINE-2238857; Pubmedail 247932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
A Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,
A Altschul S.F. Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., KcEwan P.J., McKernan K.J., Malek J.A., Gunaratne P. H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Hopkins M.I., Skalska U., Smailus D.E., Schmerch A., Schein J.E.,
M. Jones S.J., Marra M.A.;
Renerstein A.A., Hall S., Schmits D.E., Schmerch A., Schein J.E.,
M. Green E.D., Dickson M.C.,
R. Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
R. Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Schein J.E.,
M. Green E.D., Dickson M.C., Schein J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2004 (TrE
05-JUL-2004 (TrE
05-JUL-2004 (TrE
Chrdl1 protein.
                                                                                                                                                                                                                                                                                     CRDL MOUSE STANDARD; PRT; 447 AA. 9920C1; Q924K0; Q952E29; 28-FEB-2003 (Rel. 41, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Chordin-like protein 1 precursor (Neuralin) ('Name=Chrd1; Synonyms=Nrin1; Name=Chrd1; Name
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00214; VWC; 3.

PROSITE; PS01208; VWFC_1;

PROSITE; PS50184; VWFC_2;

SEQUENCE 333 AA; 37035
STRAIN=C57BL/6J;
MEDLINE=21334726;
                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001007; VWF_C. Pfam; PF00093; VWC; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GO; GO:0005615; C:extracellular space; TAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; BC066832; AAH66832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=Chrd]
                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=CD1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HSYLRSPY 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HQYLRSPY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MAR-2004) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel.
(TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Neural
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Neural Stem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (Mouse)
        PubMed=11441185;
                                                                                   (ISOFORMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27,
27,
27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 3
₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stem Cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۰,
                                                                                        ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 42; DB 2;
Pred. No. 7.2;
                                                                                                                                                                                                          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A82093A24174E1D6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                        AND
    DOI=10.1126/science.1058379;
                                                                                        BETA).
                                                                                                                                                                                                                                                                                                                                                                                           (Ventroptin).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                               Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```